The Harveian Lectures
ON
COMMON NEUROSES, OR THE NEUROTIC ELEMENT IN DISEASE AND ITS RATIONAL TREATMENT.

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LECTURE II.

GENTLEMEN,—To-night we pass from the neurotic conditions that concern the sentient being as a whole, and which I have in consequence termed "cerebral neuroses" for want of a better term, to others that have for the most part a more local bearing. The distinction is of course an artificial one, but it enables me to group the cases better, and has other conveniences as well. We shall concern ourselves, then, to-night with troubles of the thoracic cavity, or rather with respiratory and circulatory neuroses. And the first group of cases that I have to mention is distinguished by a disposition to more or less severe attacks of paroxysmal sneezing. Such cases are by no means uncommon, and they are very troublesome. I give a short note of some. A young lady comes of highly neurotic stock. Her mother suffers from bad sick headaches, and as these have become less severe they have been replaced by other neuralgic turns. This patient's brother, whom I saw, has had curious neuralgic pains in the abdomen when a child, the diagnosis of which was only arrived at after some long period of watching. Two other of the children have bad nightmare. This child is aged fifteen; she is growing fast. She is brought for what are called bad colds, but when the account of them is detailed, the attack appears to consist of sudden severe paroxsyms of sneezing, and her nose runs freely. The attacks of sneezing are so severe that they make her quite ill, and she has to go to bed for a day or two, by which time she recovers herself, and she is well for a time. She has a thin skin, and easily gets chilblains. A second case is that of a lady of thirty, who is much troubled with violent fits of sneezing and nose-running, which last about two hours every morning. There is no doubt that she is a neurotic: she has bad headaches and noises in the ears, and she already has grey hair. Two others were women, and both were asthmatic. Another case, a man, has his attacks almost every morning, more in the cold weather than in the warm, and the cold passes off as the morning wears on, mostly soon after breakfast; but before that time is reached he has used up a couple of handkerchiefs. In a little girl of six "such bad colds come on quite suddenly in her nose." A lady of forty is always taking cold. She has been to no end of doctors about her throat, and has used all sorts of vapours and inhalations. Her fingers "die" occasionally, and when her body is warm her fingers and toes are cold. She has most bothering attacks of sneezing, and is often hoarse. The sneezing comes on mostly at night, and in consequence of it she wraps her head in a shawl whenever she goes out, and takes great care of herself; but whenever she is in a good climate she is quite well. Another case is a woman aged twenty-nine. Her maternal grandfather had hay fever and asthma. She has had bad sneezing attacks for years. The attacks commence in the early morning and go on till about 11 A.M., and then cease suddenly; she has of late had much asthma. The last case I shall allude to is that of a gentleman who has been long in India. He has had malaria once or twice, and an attack of eczema once in India, and for twenty years or more he has had severe periodical attacks of sneezing. He was sent to me for transient glycosuria, and he did not allude to his nose much. I fancy he had had enough treatment for that affection, for he had fallen (unluckily, as I think, for him) into the hands of someone who had done despite to his nasal mucous membrane by means of the galvano-cautery.

These cases are very interesting; they are closely allied to hay fever, if they be not part of the disease that goes by that name. They are closely related also to spasmodic asthma, as this case will show. A man of twenty-six has had asthma since three years old. His attack often begins in the early morning by passing from a warm to a cold room, which brings on a violent attack of sneezing. This may last from thirty minutes to two or three hours, and sooner or later seems to pass down his bronchial tubes to his lungs, and then to produce a short attack of asthma, which, however, generally passes off on taking a cup of hot coffee. I am not sure, too, that they may not have some relation with Raynaud's disease. But however this may be, the affection is a purely neurotic one, and in no one of these cases was there any local disease of the nose. Nor, indeed, if we look at the history of the attack, was there likely to be, for the attack comes on in almost all the cases with the greatest suddenness, reminding one much more of the suddenness of the explosion of a nervous discharge than of the onset of an inflammation. And I think, if we study the nature of these attacks, the more one becomes convinced that the real disease cannot be any local organic change, it comes and goes so rapidly. It has been said indeed, and I dare say with truth, that this state is immediately due to an erectile condition of the mucous membrane of the turbinated bones; but if we allow that this is so, such a state of things is, after all, only an exaggeration of a physiological condition, and in no sense a local disease. I make a great point of this, because these cases are in the present day being treated by local measures of some considerable severity. I hear of turbinated bones being removed for such symptoms as I have narrated, and more often of the galvano-cautery being applied. Now I must not say that treatment of this kind is never necessary, for "never" is a word that seems to have crept into the language of men by mistake, and almost the only time it has justified its existence, and can be used with absolute appropriateness, is when we say of it that it is never absolutely true. But I think we should remember, in making use of severe measures of this kind, that we are only treating a symptom, and from the nature of the case adopting a means that is very unlikely to prove of any permanent good. I feel bound to add that in my own opinion all means of this kind are meddlesome and bad surgery, and will never bring us any credit; I will go further, and say that they come perilously near trailing an honourable calling in the mire of quackery. In saying this I pass to another neighbouring neurosis that is not altogether above a similar suspicion—the disease that goes by the name of "clergyman's sore-throat." I must apologise to the laryngologists for putting them so much in the forefront of my offence, but I dare say they will consider what I have to say is only the result of ignorance. I suppose we all come more or less across this affection, and if your experience is at all like mine, it is of this kind: it occurs in nervous persons; they are often overworked, and want a holiday. That is a very common complaint, and requires no advice from a specialist; but it often enough occurs in the country parson who has an easy life and less than enough to do. Now I have talked to several of these people, and the complaint they make is that after a simple reading exercise such as is required by the church services, the voice goes, or more commonly, I think, that they feel exhausted. I do not remember to have seen it in anyone who has been a long-winded preacher, or in one who has the gift of energetic extempore discourse; it is a disease of the feeble lack-lustre man or of the highly nervous. From talking to them I have come to the conclusion that there are some who look upon the exercise of the voice as an exhausting thing, and that when they had gone through the very modest exertion of reading the prayers they were somehow used up and virtue had gone out of them. The idea is expressed in this extract of a letter received only the other day from a young effeminate man, who has a good voice, and is going in for singing: "I forgot to ask you," he writes, "if I may bathe and swim in the season, because I have been told that it is a very weakening pastime for one who wishes to cultivate the voice." The idea obviously is that the act of singing uses up the vital energy, and that there is no sufficiency for any expenditure on other calls. So far as my experience goes, I have examined these throats many times, and have never seen anything the matter with them; and I am certain I have seen these people having a nice time of it on the Riviera, nursing their throats, and with an air of respectable delicacy about them, when all they required was a good tonic, with the reassurance that they

might with perfect safety return to their work if only they would take care to make it a work of their *will* and not of their *emotions*.

Now these are emphatically not the cases to put through a course of inhalations, of paints, of electric tickling—worse still, of galvano-cautery. They will go in for anything we advise them, and it is marvellous to me how docile, not to say imbecile, some of these patients are in abdicating all the seat of their reason. But in saying thus much it may perhaps be thought that I am speaking in an exaggerated way; for, after all, the voice and the throat are sensitive parts, and we have abundant evidence in great singers that most trivial causes may upset them. I do not think what I have said touches that question. A singing voice brought to the perfection of a great public singer is a very touchy thing no doubt, but the ordinary avocations of those who suffer from their throats—and though I have given it the common name, yet it is by no means confined to the clergy—ask no service that can be compared to the evolutions that a larynx of that kind goes through. The ordinary work of the voice, even for those who are called to address public meetings or talk much, is no such excessive tax. Moreover, it is no uncommon thing to find ordinary people become hoarse after reading or singing for a short time. But if their nerves are of proper string, they do not for that reason rush off to the throat doctor; rather do they bear the ills they have than fly to others that they know not of. Nor do these things mean any real delicacy. I assert most positively that they are absolutely independent of the general health, and are due no doubt to some local incoördination of the several structures concerned. This may arise from several causes. It may be from fatigue of the muscles; may be from inability to adapt the parts properly; it may be from some little swelling of the mucous surface under the stimulus of use; from a little hypersecretion under like circumstances, and so on. My own conception of the disease would perhaps be that it is a mild hybrid between a costermonger's throat on the one hand and the functional aphonia of women on the other. I mean to say that there are, perhaps, about it both the elements concerned in these diseases—a mild, very mild catarrh, we may call it, on the one hand, and a want of nerve force on the other. The former element is so slight that treatment for it is not required; and for the latter nothing more is necessary than a good nerve tonic. I have no objection to a poor hard-worked man of business or a clergyman having a health-giving time on the Riviera, or anywhere else. By all means let them have it if it be necessary; only let it be the remedy for what it is, for a general nerve fatigue. The advice could be then taken or rejected on its merits; but to say you have a delicate throat and must go here or there according as the latest fashion dictates (if it means anything), is a sort of verdict of consumption by innuendo that does not allow the man to be a free agent, and he obeys, often at the greatest inconvenience to others as well as himself, and often at considerable sacrifice. And while I am on this subject I will say that advice with reference to residence seems to be given often in the most reckless and ill-considered fashion, when we remember how little we really *know* about such matters.

I must next allude to the people who are always "catching cold." They are common enough, but here is one such: A man of thirty-nine years. He had ague in his youth when he lived down in Essex, but he has got rid of that, and has had very good health until he went to the East a year or two ago and got fever (he thinks not malarial) on his way home at Athens. Ever since then he has been subject to colds, and his subjection in this respect gets worse and worse. Sometimes he has cold in the head and sometimes it is a sore-throat. The slightest chill brings on an attack. Now colds, or rather a tendency thereto, are due to a neurotic susceptibility in almost all cases. The usual treatment for them is shielding the patient in all possible ways from all changes of temperature; and what is the result? It must inevitably be that, kept from all experience of changes of temperature, the surface loses its accommodative power, and in consequence becomes unduly sensitive to any change. Thus instead of a cure an ever-increasing liability to "colds" results. The man who attempts to keep himself in a uniform temperature in the English climate engages himself in a struggle with his environment in which he will inevitably get the worst of it, and sooner or later he will be crushed if he does not give up the fight. There cannot be any question that the diseases of which I am speaking are the products of civilisation, and that they are gradually evolved out of the trivial ills and troublesome sensations that are the common lot of mankind, by giving way to them in the first instance instead of learning to bear them, which in the end would mean not to mind them. In so far as the inability to bear them is an indication, as it often is, of an enfeebled nervous tone, so far they are proper cases for drugs; but bear in mind that it is always to be medicine *plus* good advice and rudimentary lessons in physiology, and that the latter part of the treatment is the more radical of the two.

And from this I pass to a closely allied disease, to another product of civilisation—viz., spasmodic asthma. Of course this disease may be produced in several ways, but I shall not be misunderstood when discussing it to speak of the several organic causes by which it is brought about, but simply of what is sometimes called true spasmodic asthma, because, forsooth, no definite organic cause can be discovered for its existence. I say, again, no true definite organic cause can be discovered for its production. To say that implies that we have searched for one—and I would not say have searched wrongly,—but what I would say is that in searching for a cause of this kind let us beware of becoming engrossed with the idea that there is a structural change if only we could but find it. In these latter days the search for tangible causes is so successful that it has become absorbing, and there is a definite intolerance abroad of those who talk of functional disease. No doubt, from the point of view of those who attack the citadel of ignorance *ab extra*, functional disease is a cloak for ignorance, and it is too often made the pretext for the wildest notions, the most shameless quackery, and at the best is too often obstructive to material progress. Nevertheless, grounded as I have been in the coarser facts of morbid anatomy by thirteen years' work in the post-mortem room, I consider I have a right to say that there is still a large place in the practice of medicine that is legitimately filled by functional diseases, and that probably there always will be. The huge lunatic asylums that may be seen growing up all around us go a long way towards proving the truth of such a contention, but there are many other diseases along the lines of my present subject, and spasmodic asthma is one of them. When I study this disease in a comprehensive way, it seems to me as nearly certain as can be that it is the direct result of cultivation, and in its worst forms often of our methods of its *treatment*. Asthma can be fostered and nursed into a very terrible disease, and often is so. And, on the other hand, I believe that much may be done to mitigate its severity, to eradicate it altogether, or, at any rate, to divert it into more general paths of explosion, if we make ourselves familiar with its history.

What is the history of spasmodic asthma? The first thing that I learn about it is that it largely occurs in those who have in one form or another a neurotic inheritance, or are themselves clearly of that temperament. I have gone over my own cases from this point of view, and this is the result. Of fifty-one cases (twenty-seven males and twenty-four females), nine only were not evidently neurotic. In eight the disease was hereditary; in ten there was rheumatism in the family; in five a pronounced history of megrim. In others I have noted the existence of diabetes and somnambulism in the relatives. In the patients I note such things as chorea; "a highly nervous and crotchety lady." "If anything goes wrong in business the man is sure to have an attack"; "the attack comes on after any little excitement." A girl of seventeen had convulsions when an infant; another young lady had hysterical aphonia and urticaria, and bad rheumatism at other times; another patient has had urticaria, headache, and asthma. And so the story goes all through the list. I need not take up time by going more into details. But as an amusing illustration of the extraordinary mental feebleness that may be sometimes reached where our ailments are in question, I cannot forbear to tell the following. A lady came to me for asthma, and in the course of conversation said she thought she ought to tell me everything. The confession she had to make was that she had put herself under someone who undertakes to treat disease by correspondence. I asked her what had led her to seek advice from so unreliable a source, and her reply was: "Well, I knew he must be a good man because he advertises in the '*Christian*'"!

Another point about asthma has often struck me, too—

viz., how seldom, comparatively speaking, it occurs in the lower classes of society. It is chiefly a disease of the middle and upper strata—a disease, I believe, of infancy and childhood as much as of adult life, and, I would add, ought to be confined to those stages of existence. A case of pure spasmodic asthma is quite uncommon in the wards of a hospital, and in so being may be offered as a fact in support of what I advanced in my last lecture—that it is probable that the evolution of neurotic tendencies is proceeding faster in some strata of the people than in others. And when I say this of asthma, I am not sure that in all of what I am going to call its stages of evolution it is much more often absent in the lower than in the upper classes; and, if this is true, then it may go to support my contention that the pronounced disease is eradicated in no small number of cases by the gradual hardening of the nervous system that takes place under the conditions of the struggle for existence that prevail amongst the lower sons of toil. But to make my meaning clear, I must now explain what I consider to be the different phases of spasmodic asthma.

As I look along the seven stages of human life, from its cradle to its grave, I find nothing that at first sight resembles spasmodic asthma at the early periods of life; that is under, say, three or four years. And not finding it, and, further, not seeing any evident reason for its absence, for there is nothing in its symptoms that would betoken it was a disease of a special period, one not unnaturally scans the wide plain of infantile disease, to see if perchance from this point of view some rudiment or embryonic form of the malady can be discovered. I cannot but think that a disease is soon discovered which has points of great similarity, although wanting the most characteristic feature of the mature malady, if so I may speak of it. The disease I have in my mind you all know well. I mean the common gastro-pulmonary fever that any practitioner sees once or twice in every day. Here is the sort of case I mean. A little boy four years old, who comes of a decidedly neurotic stock, and who, moreover, has shown decided evidences that as was his mother in this respect so is he, is quite well on a certain day, and ails a little towards night. His mother says he has got a chill; his father knowing more of the world, perhaps, and altogether having a more critical disposition, is not so sure that the child has not overeaten himself. Anyhow his so-called cold gets worse, a cough comes on, and he develops a sharp fever. The disease, whatever it is, quickly rolls along the bronchial tubes, and when the doctor arrives he has all the appearance of being seriously ill with a sharp attack of bronchitis. To make matters worse, apparently, he is sick several times in the course of the first twenty-four hours, and at the end of that time he is still breathing rapidly and seems very ill. Within a day or two, however, the temperature drops, the acuteness of the chest disturbance subsides, and within three or four days the whole affair is at an end, leaving the little patient hardly worse than he was before the attack commenced. Now, one acute illness of this sort tells us nothing; the disease still might be many things, and the field is left still contested. "My dear," still says the wife, "I am sure the child caught a chill," and a host of reasons are given to prove it, but the father keeps also to his opinion, and declares that the buns he saw his little glutton eating were enough to do a great deal more damage than was the case here, had not the destroying angel stayed his hand. The doctor looks on at this domestic strife and shrugs his shoulders, and departs well satisfied that the illness that threatened so seriously has proved abortive. But by-and-bye the same scene comes over again, and yet again, and the doctor at any rate grows wiser, for he learns then to know his patient's constitution, and he knows that whatever may be the *exciting* cause, the real one lies far deeper in the primordial tendencies of the child. And the experiences of general practice will tell many that I am not drawing upon my imagination in the least, but that the picture is one of the commonest that is met with in the daily round. There can be no question that these sort of attacks occur in particular families and belong to particular children; and, as I have said elsewhere, they are to my mind paroxysmal neuroses, and they are the representatives in babyhood of spasmodic asthma. For some reason or other, which I shall not even attempt to guess at, the respiratory paroxysmal neuroses put on this form in infancy and early life; while that of spasmodic asthma is characteristic of older children and adults. I think, to repeat what I said just now, that in comparison with spasmodic asthma the gastro-pulmonary fever of infancy is quite a common affection; and well it may be, if, as I say, it is the special reaction of the infantile respiratory system to nerve storms of all sorts. But its prevalence also admits of other explanations; one being that as the embryo nervous system grows in health and education it becomes less explosive, and thus the tendency vanishes. Another, that as development goes on other viscera come more into the field, the cyclone is drawn into other regions, and the pulmonary tract escapes.

Now dealing first with the treatment of these infantile cases, over and over again these children have been brought to me because their proper treatment has not been rightly apprehended, because their nature has not been recognised. They have been supposed to be due to cold and chills, and the *disease* has been *treated*, and not the *patient*. But to shield these children from every possible draught, and to keep them at home when there is the least suspicion of the wind being in the east, are not the means to cure them; such only make them worse. It is because they have been getting worse, in spite of treatment, that they are for the most part brought to me. Treatment of this kind begets a more irritable state of nervous centres, and the only way to cure them is to harden them. I need hardly go into the details of their management, they are so common sense and plain; but, in short, they are to have their bath regularly, to be warmly but lightly clad; they are to be taken out into the air as much as possible; and they are, in fact, to undergo a process of hardening and education by which their nervous susceptibilities are to be made less susceptible. As regards drugs, if they have any at all, they are to be such as give tone to the nervous system, such as nux vomica and iron. The treatment of asthma is not otherwise. You will never cure asthma by coddling. It is a local expression of an undue sensitiveness of the nervous system to the changing circumstances of its environment; a phlegmatic power of accommodation that, reacting slowly, reacts too late; and in the meantime the higher centres left unguarded by the laggard signal, and bereft of their natural protection, are stimulated too strongly, and a storm or spasm is the result. Put it in what language you like, that, I take it, is in effect what happens in spasmodic asthma. Supposing, now, that we elect to treat the disease according to the common fashion: we prescribe some local inhalation to the respiratory mucous membrane, which in some one of several ways leads to the cessation of the spasm. What happens is best illustrated, I think, by the infant, who, for each new toy, drops all its old ones; or, perhaps, by the old adage, you cannot do two things at once. The bronchial mucous membrane, stimulated by some powerful aromatic, forgets all about its previous excitement, and between the two stools the patient happily sinks to his much-needed rest. But whether stimulant or sedative, so far as regards the nervous system, the same result accrues—viz., that a sugar plum is put in its mouth and it is told not to be a bad boy again; and with the usual result—that when the sweet is gone it is soon on the look out for another, and another it gets, and so on. In more prosaic language, the mucous surface receives a something that for the time being causes it to ignore the conditions of the environment, at which it had taken offence; but the effect of the drug having passed off, it is more alive than ever to the original discomfort, and again a spasm is set up. Again the drug is repeated and the same order is observed, and so on again, and again, and again, with, however, this important difference, that the interval between the spasmodic attacks grows shorter and shorter as the mucous surface grows more hungry. I take it that the nervous circuit from lung to brain of the old asthmatic who has been addicted to Himrod's treatment or such similar compounds is the exact counterpart of the nervous circuit from nose to brain of the chronic snuffer; but the pangs of the bronchia are the more urgent.

As regards children there is something else to be said. They are not quite so often as adults treated by these patent powders; but they are very generally treated by looking on the disease as the result of cold, and they are boxed up in an over-warm apartment; they are smothered in clothes; they are not allowed to have a decent romp for fear they may get hot and take a chill; and altogether they are only too liable to live a most unhealthy life. Their most saving power, that of accommodating themselves to their environment, is nursed

into imbecility, and then the wonder is that they grow worse instead of better. I would venture to point to a more excellent way than that; more excellent, because it is assuredly founded upon a physiological basis; and it is this, to find out by experiment where the child can live best. It is always a matter of experiment this; not the greatest authority in all the world can say for certain, for I say asthma is a functional disease of the nervous system, and it is in diseases of this sort that the individualism of the patient most crops up. Having found a place of residence, turn the child out to grass, in place of keeping it in-doors on all doubtful days; gradually accustom it to be out in all weathers, and make it as perfect an animal as can be in these days, when conventionality is part of the air we breathe, has penetrated to the inmost recesses of our homesteads, and, for aught I know, perhaps even to the pigstye. It is difficult indeed to be a healthy animal in these days; but that is the way to cure asthma in the child, and it meets with a large measure of success. I have seen ample evidence of the ill success of the coddling method to have no doubt which is the better plan, had I no other grounds; but I do believe that those other grounds that I have pressed upon your attention are not unworthy of it.

(To be concluded.)

ABSTRACT OF THE

Lettsomian Lectures

ON THE

SURGICAL TREATMENT OF TRIGEMINAL NEURALGIA.

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LECTURE II

THIS lecture was entirely devoted to a consideration of the various operations on the different branches of the fifth nerve, Mr. Rose passing each procedure rapidly under review. The topographical and deep surgical anatomy of the parts concerned was also discussed, and the various methods of dealing with the division of the fifth nerve were explained at length. Regarding the superior maxillary division, the lecturer described the orbital method and the antral method of exposing and removing large portions of this branch of the fifth nerve. He stated that the third means of dealing with this division of the fifth nerve—viz., the *pterygo maxillary operation*—was originally suggested by Professor Lücke. He made an oval incision extending from the outer canthus first backwards, and then downwards and forwards; the masseter muscle is then detached from the lower border of the zygoma, and turned down, whilst the zygoma itself is sawn through in front and fractured behind; so that it, together with the temporal fascia attached, could be turned upwards. By carefully dissecting down in front of the tendon of the temporal muscle the spheno-maxillary fossa was reached, and the nerve divided. The parts were then replaced, the muscle being sutured to the zygoma. The results of this method of dealing with the zygoma were extremely unsatisfactory, from the fact that the muscle usually did not unite with the bone, and hence cicatricial deformity and functional weakness were produced. Professors Braun and Lossen introduced a plan to obviate this—viz., by detaching the temporal fascia from the bone, and turning the latter downwards together with the masseter. This procedure removed one of the objections to reaching Meckel's ganglion by this route, but in order to remove the infra-orbital nerve it is necessary to make an additional incision over the site of the infra-orbital foramen. The great advantages claimed for this operation are that the cicatrix will be less obvious on looking at the patient full-face, and the hæmorrhage will be less in that the internal maxillary artery can be secured before the fossa is opened. Moreover the antrum is not opened, and the risk of septic contamination of the wound considerably diminished.

The lecturer, whilst admitting that he had never attacked the second division of the trigeminal in this way, mentioned that an opportunity had recently occurred to him whilst dealing with a case of ankylosis of the jaw of investigating on the living subject its practicability, and he had been much impressed by the ease with which it could be accomplished. He also commented on the statistics which have been published by Segond[1] of eleven cases which had been dealt with in this way by Czerny,[2] Madelung,[3] and himself, though the relief given had not been of long duration.

The third division.—After describing the surgical anatomy of the *third* or *inferior maxillary division* of the fifth nerve, Mr. Rose proceeded as follows:—

"The *inferior dental nerve* can be exposed in three situations—at its exit from the mental foramen, in the dental canal, and above the dental canal. *At the mental foramen* it may be divided by a submucous operation. Its position is easily ascertained—viz., between the bicuspid teeth. The operation, however, is not to be recommended, as the pain invariably returns. The nerve can be reached *in the dental canal* by removing a disc of bone comprising the outer layer of the jaw by means of a three quarter-inch trephine applied over its course about the junction of the ascending and horizontal rami. If the circle of bone be skilfully removed, the nerve and the artery can be seen running together in the bone, and the former lifted on an aneurysm needle. The skin incision for this operation should be made along the line of the jaw, and about half an inch behind it, never over the part to be trephined. Another somewhat similar method of dealing with the nerve is that of Velpeau, who through the same kind of incision trephined the jaw through the ascending ramus, immediately over the dental foramen. At this spot the bone is much thicker below than above, and hence the trephine should not be used when the upper part of the jaw has been divided; the remaining half circle of bone is best detached by means of elevator and chisel. Linhart operates in much the same way, but detaches the masseter by a vertical incision, which is liable, I should fear, to divide all the branches of the facial nerve there present, and consequently lead to paralysis and subsequent facial disfigurement. Gross has recommended the use of the dentist's drill as a means of destroying the nerve in the canal by perforating the jaw. The results of these operations are unsatisfactory, and I have therefore entirely abandoned this method of treating neuralgia of this nerve, always having recourse to the higher operation. The inferior dental nerve has been attacked *just above* its entrance to *the dental canal* in the lower jaw by three different methods, which we may fairly describe as—(*a*) the intra-buccal method; (*b*) the retro-maxillary; and (*c*) the transmaxillary.

"The *intra-buccal* method is the form the operation originally took; it was proposed originally by Lizars, and performed for the first time by Michel of Nancy in 1856. More recently it has been again advocated by Billroth, but it is commonly known as that of Paravicini.[1] After alluding to the course taken by the nerve under the mucous membrane of the mouth, the operation was described in detail. In criticising it, the following objections were noted: first, the communication of the wound with the mouth, leading to septic contamination, and in one recorded case (Michel) to death from septicæmia; secondly, the limited portion of the nerve which can be excised (Billroth says one inch); thirdly, the difficulty of the operation owing to the want of space; and finally, the possibility of serious hæmorrhage, necessitating, in a few recorded instances, ligature of the external carotid.

The *retro maxillary* operation, or, as it is commonly called, the Lücke-Sonnenburg method, after the two surgeons who originated it, is described by Ullman, who has recently advocated its use, as follows:—The head is allowed to rest on the sound side, or even hanging down over the end of the operating table. An incision is now made along the posterior border of the jaw, and from 1·5 centimetres above the angle to the centre of the horizontal ramus. The branches of the facial nerve to the neck are the only ones of importance divided, but of course the facial vessels will need to be ligatured. The parotid fascia is now incised, and the gland drawn upwards as far as possible. The internal pterygoid muscle is detached by scissors from the mandible, and the entrance to the inferior dental canal is

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[1] Revue de Chirurg., March 10th, 1890.
[2] Cent. f. Chirurg., 1892. No. 16.
[3] Berl. Klin. Wochenschrift, Dec. 21st, 1887.

indicated by the spine of Spix, which should be carefully sought for. The nerve is isolated and divided with scissors peripherally; it is held tense with forceps, and serves, if necessary, as a ready guide to the foramen ovale.

The *transmaxillary operation* is that which promises to be the most effectual, and is, perhaps, that most generally adopted in the present day. It is usually accomplished by deepening the sigmoid notch. Inasmuch, however, as the lingual nerve can also be dealt with by this method, and since both nerves usually need simultaneous division close to the base of the skull, the description of this operation was deferred until the discussion of the methods of reaching the trunk of the nerve at the foramen ovale.

The lingual nerve.—After briefly describing the anatomical relations of this nerve, the method of reaching it through the mouth was mentioned, and unfavourably criticised, although it might be justifiable in some cases of malignant disease of the tongue. Luschka's method of reaching the nerve through the submaxillary region was detailed; but the depth at which the nerve lies was stated to constitute a serious bar to the adoption of this operation. The Lücke-Sonnenburg plan described above could also be applied to this nerve. The lecturer, however, emphatically maintained that all measures directed to this nerve alone are ineffectual, and hold out little prospect of permanent relief.

Division of the nerve at the base of the skull.—Mr. Rose continued as follows:—"Previous to describing the different methods of reaching the foramen ovale which have been proposed and practised, it may be well to examine its chief anatomical relations.

"*Surgical anatomy.*—The foramen ovale is an aperture at the root of the great wing of the sphenoid, close to its junction with the external pterygoid plate. It lies immediately behind and external to this process, and is on a level with the eminentia articularis of the temporo-maxillary joint, being placed at a depth of about one inch and a half to two inches from the surface of the face. The long axis of the foramen is directed backwards and outwards, and at its postero-external margin it is only separated by a narrow neck of bone from the foramen spinosum, which lies at the base of the sphenoidal spine, and through which the middle meningeal artery passes. It will be seen, therefore, that the foramen ovale lies midway between the base of the external pterygoid plate and the spine of the sphenoid, being covered by the origin of the external pterygoid muscle. The internal maxillary artery is superficial to both pterygoid muscles in the majority of instances, lying between the external pterygoid and the jaw and passing into the spheno-maxillary fossa through its two heads. Occasionally the vessel passes between the two muscles and thence to the fossa. This point should be kept in view in any operation upon these parts, as the early ligature of the vessel is most desirable. There is also a large plexus of veins in this region, from which troublesome hæmorrhage is sure to arise. But, however variable the vascular distribution, the dental and gustatory nerves are quite regular in the position which has been already described; emerging from beneath the external pterygoid muscle, they lie upon and are superficial to the internal. To expose these nerves in some way or other must be the first aim of the surgeon, and, this done, they can be traced to the base of the skull with comparative ease and there divided. Three different plans have been suggested and practised for reaching the foramen ovale—viz. (*a*), Pancoast's method, with various modifications as suggested by Salzer, Krönlein, &c.; (*b*) the Lücke-Sonnenburg method; and (*c*) the plan of deepening the sigmoid notch as practised by Mr. Horsley, myself, and others.

"(*a*) Pancoast was the pioneer in this department of surgery, and his first operation was performed nearly twenty years ago. It appears that only one case was treated in this way, but the operation was an important step, and is greatly deserving of record, in that it has served as a basis upon which many modifications have been grafted. He dissected up a rectangular flap comprised of the skin and masseter muscle, and with its base at the zygoma, exposing by this means the temporal tendon, which was then detached from the coronoid process. This process was next removed by cutting pliers close to the ramus of the jaw, and the pterygo-maxillary fossa opened up. The attachment of the external pterygoid muscle was then divided, the internal maxillary artery having been, if possible, previously tied. The third division of the trigeminal could thus be reached as it emerged from the foramen ovale. The disadvantages of this method are that the temporal muscle is very widely detached from the underlying bone, and that the coronoid process is removed. The operator also must have been considerably cramped in his manipulations, as the zygoma was left intact. Its removal or temporary displacement was soon added as an additional step in the operation. Again, the incision was devised irrespective of the distribution of the facial nerve, and the integrity of the duct of Stenson must have been seriously threatened. Of necessity the resulting cicatrix was extremely unsightly. Salzer operated through a curved incision, having its convexity upwards; it extended from just in front of the tragus above the zygoma, and terminated anteriorly at the lower border of the malar bone. This incision passed directly to the bones, and the zygoma was divided by the saw anteriorly at its attachment to the malar, and posteriorly in a line with the eminentia articularis. The temporal muscle was divided by a transverse incision across its fibres a little above the zygomatic arch, and the whole flap of soft tissues, including the loose piece of bone, was drawn down by scraping away with a blunt raspatory the lower fibres of attachment of the temporal muscle to the squamous bone until the pterygoid ridge of the great wing of the sphenoid was reached. Still, keeping close to the bone, by detaching the external pterygoid muscle access was gained to the foramen ovale; this was much facilitated by keeping the mouth open, as by this means the coronoid process was depressed and kept out of the way. There are obvious objections to this procedure; the operator has to work down on the nerve from above, and his manipulations are much hampered by the limited space at his disposal. Necrosis of the zygoma has moreover occurred, but it can be avoided by adopting the precautions suggested in my next lecture.

"Another modification of Pancoast's original plan is that originated by Krönlein[4] in order to reach and divide both the second and third divisions of the nerve at the base of the skull. Inasmuch, however, as this method, with the exception of the skin incision, is practically identical with the preliminary steps of my present operation for removing the Gasserian ganglion, I shall defer a full description of it until my next lecture. In brief, it consists in dividing the zygoma in front and behind, and turning it down with the masseter after releasing it from the temporal fascia; and in dividing the coronoid process with the chisel and turning it up, together with the temporal tendon. The external pterygoid muscle is then detached from the skull and the foramen ovale exposed. The foramen rotundum may be reached afterwards through the pterygo-maxillary fissure, somewhat according to Lücke's method already described. The same objection applies to this as to the former operation, in that it is an unnecessarily severe proceeding when the third division alone is to be dealt with; a similar result can be obtained by the simpler operation of deepening the sigmoid notch. But if it be requisite to divide the second division simultaneously with the third, then this plan may be advantageously employed. Such a step, however, will be rendered unnecessary if the Gasserian ganglion can be safely reached within the skull.

"(*b*) The foramen ovale has also been reached by the Lücke-Sonnenburg, or retro-maxillary operation. Ullmann[5] has recently recorded two cases in which he made use of this measure, and speaks most highly of it, inasmuch as the bones of the face are not interfered with except that it is occasionally necessary to divide the angle of the jaw and turn it temporarily outwards, wiring it subsequently; the superficial nerves divided are of no importance, the scar is placed well out of view, and the movements of the jaw subsequently are less disturbed. I have had no personal experience of this. Mikulicz and Obalinski have proposed to reach the foramen ovale in a somewhat similar way. The former makes an incision from the mastoid process along the anterior border of the sterno-mastoid to the level of the hyoid bone, and then upwards and forwards to the border of the jaw. The skin is now dissected up, and the bone, carefully stripped of its periosteum, is divided by a chain saw behind the wisdom tooth, great care being taken not to open the mouth cavity. The internal pterygoid muscle is now to be detached, and the vertical ramus can then be drawn well outwards, leaving a funnel-shaped opening with its apex at the base of the skull in which

[4] Deutsche Zeitschrift für Chirurg., xx., p. 484.
[5] Wiener Klinik Wochenschrift, June 20th, 1889.

the nerves are readily found and traced to the foramen.

"(*c*) The third method, and that which I consider the best, not only for reaching the foramen ovale, but also for removing the largest extent of these trunks, is that of *deepening the sigmoid notch*, a proceeding modified by Mr. Victor Horsley from Velpeau's original method of trephining the jaw. The following description of the way in which I perform the operation is similar to Mr. Horsley's with a few exceptions, my skin flaps being curved, while his are angular, &c. It may be described as follows:—The skin is first rendered perfectly pure by previous washing with a 1-20 carbolic lotion, and any hair or down removed, the razor being carried for a short distance into the temporal region. The auditory meatus and external ear are purified thoroughly, and the former plugged with a piece of salicylic wool or cyanide gauze. The skin incision is so planned as to leave a scar as unobtrusive as possible. Commencing about the middle of the zygoma, the knife is carried backwards and downwards over the parotid region to the angle of the jaw, and then for a short distance along the horizontal ramus. A semilunar flap consisting of skin and subcutaneous tissue only should be raised and turned forwards, and for convenience temporarily stitched across the opposite side. This flap must be carefully dissected up so as not to injure any of the branches of the facial nerve. By this means are exposed the masseteric fascia, the branches of the facial nerve passing across Stenson's duct and a portion of the parotid gland. The deep fascia and masseter muscle are then divided by a transverse incision below and parallel to Stenson's duct, cutting directly down to the bone about a centimetre below the sigmoid notch. Great care must be taken not to wound any lobules of the parotid in so doing, for even though the main duct be not divided a salivary fistula may ensue, leading to interference with the healing of the wound. The outer surface of the jaw is next denuded of periosteum by means of raspatories, and the soft parts held aside by suitable retractors to allow of the application of a trephine, the diameter of which should not be less than three-quarters of an inch. It should be so applied as to leave between it and the sigmoid notch a narrow bridge of bone which can be subsequently clipped away by cutting pliers, and a sufficient thickness of bone in front and behind to preserve the continuity of the jaw with the articular and coronoid processes. Great care should be exercised in consequence of the varying thickness of the bone, the lower part being thicker than the upper; otherwise the inferior dental artery may be cut through by the trephine and give rise to troublesome hæmorrhage at a time when it would be extremely inconvenient. The disc of bone having been lifted out and the bridge of bone between the condyle and coronoid process clipped through with bone pliers, some loose fatty tissue presents and should be carefully picked away with two pairs of dissecting forceps. The tendon of the temporal muscle is thus more clearly defined, and must be held forwards if necessary. Narrow spatulæ are useful at this stage, not only to keep the wound open, but also by their pressure to arrest hæmorrhage from divided muscular branches. If the bleeding is troublesome the wound should be packed for a few moments with small pieces of sponge wrung out of hot 1 in 40 carbolic lotion, any obvious bleeding point being secured by ligature. The inferior dental artery is usually first seen, and may be secured by passing two ligatures around it with an aneurysm needle and dividing it between them. The lowest fibres of the external pterygoid muscle are seen running transversely across the wound, and require to be held upwards or carefully divided, to demonstrate the two nerves passing down from behind it. The trunk of the inferior dental nerve can then be raised upon an aneurysm needle, and the lingual found a little internal and in front of it. It occasionally happens that the nerves lie in such close proximity to one another that they are picked up together. It is advantageous to pass a silk or catgut ligature around them in order to be able to make traction upon them. It is now easy by a little manipulation with the handle of a scalpel to separate them right up to the foramen ovale, which can even be seen if the external pterygoid muscle be held out of the way. The nerves can then be divided close to the skull either by scissors or knife, and the meningeal artery should be in no danger if the nerves have been carefully isolated. Peripheral traction is also employed so as to draw up as much of the nerve as is possible, and thus a considerable portion—more than an inch—of the trunks can be readily removed. All bleeding having been arrested, the wound is carefully irrigated with some 1 in 40 carbolic lotion, and the skin flap neatly brought together with a continuous suture. There is no need to insert a drainage-tube, and as a rule healing by first intention is readily obtained. I have performed this operation repeatedly during the last seven or eight years, with comparative ease, with relief to the patient for the time being, but I must also confess that in by far the majority of the cases the pain recurred at the end of a year or two, necessitating those further measures which I shall detail in my next lecture."

(This lecture, like the former, was illustrated by diagrams representing the position of the different divisions of the nerve, and by drawings of the different operative measures alluded to.)

Clinical Lectures
ON
STRICTURE OF THE ŒSOPHAGUS,
WITH FOURTEEN ILLUSTRATIVE CASES, IN FOUR OF WHICH GASTROSTOMY WAS SUCCESSFULLY PERFORMED.

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LECTURE II.

GENTLEMEN,—In the last lecture I discussed with you fully, and illustrated to you by cases, the most common and therefore most important variety of œsophageal obstruction—namely, carcinomatous disease. To-day I will merely allude to sarcoma of the œsophagus, make a few remarks regarding benign tumours, then consider cicatricial stricture, and, subsequently, the general question of prognosis. Sarcomatous disease of the œsophagus is very seldom met with as a primary lesion, but frequently the gullet becomes implicated secondarily. This is most commonly observed in sarcoma of the lungs, mediastinal or cervical glands, thyroid gland, larynx, and of the vertebræ. Rosenbach has reported a case in which a soft, transparent, and lobulated tumour about the size of a hen's egg was attached to the upper end of the œsophagus on the right side, and which, on microscopic examination proved to be a small round-celled sarcoma. A case is also recorded by Dr. Chapman[1] and another by Dr. Lauriston Shaw.[2] In the latter case the sarcoma appeared as an ulcer with well-defined margins, and, destroying an extensive area of the mucous membrane of the gullet, eventually it perforated the posterior wall of the trachea just above the bifurcation.

Benign tumours of the œsophagus are very seldom met with in practice. It is a remarkable fact, and one not easily explained, that while the pharynx, larynx, and posterior nares are all liable to be occupied by non-malignant neoplasms, the gullet very seldom is. Indeed, benign tumours are so seldom seen in the latter situation that I do not purpose to occupy time by referring to the cases which have been recorded further than to say that cases of papillomata, cysts, fibromata, adenomata, and lipomata have been published as curiosities, and I have in this jar a remarkable example of a very large myoma of the gullet. This tumour, as exhibited in the preparation, is situated in the lower part of the œsophagus, its inferior extremity just reaching the cardiac orifice of the stomach. The tumour measures four inches and three-quarters from above downwards, one inch to one inch and a quarter from before backwards, and on an average about two inches laterally. It lies mostly free, but is attached to the posterior wall of the passage by a very thin fibrous band about an inch and three-quarters in length, and with its upper edge about two inches beneath the superior margin of the tumour. The œsophagus, at the

[1] American Journal of Medical Science, 1877, p. 433.
[2] THE LANCET, March 21st, 1891, p. 660.

part occupied by the tumour, was much dilated, and its mucous membrane presented considerable ulceration. On microscopic examination the tissue was found to be composed of elongated spindle-shaped cells presenting the character of the smooth muscular fibre cell. The tumour was thus concluded to be a myoma or muscular tumour. With the exception of the œsophagus, all the organs of the body were normal. During life the patient, who was under the late Dr. Steven in ward 5, complained chiefly of difficulty and pain in swallowing, which, as he stated, were first experienced about two months before death. There was no actual vomiting, but when an attempt was made to swallow, the food soon regurgitated. During his stay of two months in the hospital, examination with the bougie detected an obstruction in the œsophagus. The patient, who on admission had a good complexion and was not emaciated, began after a fortnight's residence to lose flesh rapidly, till at death he was extremely emaciated.[3] Again, this other specimen, also from the museum, is an example of a simple papilloma of the œsophagus. The tumour is situated on the anterior wall of the gullet, immediately behind the cricoid cartilage, and only involves the superficial structures of the mucous membrane. During life it caused considerable obstruction to swallowing, although it is not larger than half a grape. The patient died of Bright's disease, but for a short time before death he was unable to swallow solid food, and even fluids passed with difficulty.

The diagnosis of benign tumours, unless when they are so high up as to be visible, is by no means easy. The slow development of symptoms, the absence of pain, and no involvement of the lymphatic glands, distinguish benign from malignant neoplasms, and the history of the case in respect to injury usually prevents traumatic stricture from being overlooked. When the tumour is situated high up, as in the specimen of papilloma I have just shown you, dysphagia develops rapidly; while if the growth is situated low down, as in cases of myoma, a compensatory dilatation of the gullet may occur, so that food passes, even although the tumour may have attained an enormous size.

The next form of obstruction which falls for our consideration is cicatricial stricture of the gullet. The etiology of this form of stricture is fully demonstrated by the specimens and cases which you have seen. When the mucous membrane is injured in any way, either by a wound or by the action of severe inflammation, the abraded surface separates, and granulation tissue fills the vacant space; and, as a consequence of the development of the round-celled into more highly developed tissue, contraction takes place, and the lumen of the gullet is diminished. I have here a specimen which was removed from the subject of a very distressing group of cases. Three children were left by their mother, and on the table of the house a cream jug was placed, the contents of which the young ones proceeded to divide amongst themselves, believing that it contained cream. Their ages were three, five, and ten years respectively. They divided the contents of the jug equally, and all drank it at the same time. Instead of being cream, the contents of the vessel were a mixture of sulphuric acid and ground pumice-stone used for cleaning brass. The youngest child died, but the two others recovered.[4] This preparation shows you the destructive action of the poison. I may say that when the patient was admitted the mucous membrane of the inside of the lips, dorsum of the tongue, and palate had a white appearance, as if burned by a corrosive acid, and the patient was vomiting a thick tarry-looking substance, which had a strong acid reaction. The peritoneal cavity contained several ounces of fluid, which had the appearance of a mixture of chocolate and milk, and was devoid of fæcal odour. The peritoneum also contained a quantity of gas. The stomach had been completely charred and thrown into large irregular folds, and when the slough was removed an eroded and bleeding surface was exposed. The duodenum contained a quantity of coffee-like fluid, but there was no destruction of its mucous membrane. The two other children recovered from the immediate effects of the poison, but subsequently they suffered from stricture of the œsophagus. To these cases I shall refer when speaking of treatment.

[3] The full account of this case is recorded by Dr. Joseph Coats in the Glasgow Medical Journal for February, 1872.

[4] The patients were in the first instance admitted into Dr. Wood Smith's ward, and I treated the two eldest for cicatricial stricture afterwards.

During this session you have had brought under your notice at the demonstrations four cases of cicatricial stricture, and in all of these the contraction has been caused by injury from swallowing chemicals or hot fluids. When the injury is severe or the poison concentrated, the gullet and stomach may be so destroyed that death results within a few hours. You have here two specimens of sulphuric acid and one of nitric acid poisoning. In the first two mentioned cases the acid was taken in considerable quantity and in a concentrated form, so that the œsophagus is denuded of its epithelium, and the longitudinal muscular fasciculi are exposed. In both cases death occurred within twenty-four hours. When, however, the injury is less extensive or severe, an acute œsophagitis follows, the destroyed mucous membrane becomes replaced by granulation tissue, and, as healing progresses, the cicatricial tissue contracts. The extent of the stricture depends upon the primary injury. Contraction takes place slowly, so that the usual history of the case is that while the patient suffers severe pain, and experiences great difficulty in swallowing immediately after the accident, within a few days relief comes, and he is able to swallow food easily for weeks. Then the granulation tissue begins to contract, and the patient complains of steadily increasing dysphagia. The stricture may only occupy a small area of the gullet, as in this specimen. Here a portion of the œsophagus is laid open, and a stricture is seen at its centre, where the muscular fibres are very much contracted. The stricture is caused by cicatricial contraction extending through a small area of the long axis of the œsophagus, the contracted portion not including more than a quarter of an inch of the length of the gullet. The walls are normal both above and below the stricture. In other cases the contraction may extend throughout the entire length of the tube, or there may be several smaller strictures. In all cases of cicatricial stenosis of the œsophagus, the most pronounced and characteristic symptom is difficulty in swallowing, but it must be remembered that the closeness of the stricture cannot always be judged by the amount of dysphagia. Not uncommonly, as in the cases of G. R—— and D. McA——, whom you saw at the beginning of the session, the organic stricture is accompanied by spasm.

CASE 10.—G. R——, aged thirty-one, was first seen by me in September, 1889, and since then he has been coming to the ward regularly to have a bougie passed. The history of the case is very simple and short. About two months previous to admission—that is to say, in the middle of July, 1889—he swallowed, by mistake for cream, a tablespoonful of a mixture of caustic soda and lime used for cleaning brass. Immediately after swallowing this he was seized with a severe pain in the mouth, throat, and stomach, and at once vomited the contents of the stomach. For the first fortnight he suffered from the ordinary symptoms of acute inflammation of the œsophagus and mouth—namely, painful dysphagia, dyspnœa, and expectoration of blood-stained mucus and shreds of mucous membrane. When admitted to hospital the pain was relieved somewhat, although still occasionally present in a paroxysmal form. At this time it was found almost impossible to pass a bougie, partly on account of the suffering which it caused the patient, and partly by reason of spasm induced by the presence of the instrument. For some time he had to be nourished by rectal injections, but after a fortnight's rest to the œsophagus I succeeded in introducing a small-sized bougie (No. 6), and from that time till now (March, 1891) he has had instruments passed at regular intervals, and he is thereby enabled to take a good quantity of solid and fluid food; he has gained his normal weight, and follows his occupation. In this case the obstruction includes the whole or nearly the whole length of the gullet, so that in introducing an instrument no localised stricture is detected, but if the patient fails to have a bougie introduced, say, for a fortnight, he is soon reminded of his condition by finding that he is unable to swallow solid food.

In another case which you have seen this session the stricture, although caused in much the same way, is very limited in extent.

CASE 11.—G. T——, aged forty-nine, was admitted into the Royal Infirmary on Sept. 10th, 1890. Eight months previous to admission he swallowed a small quantity of caustic soda solution, which was vomited immediately, but nevertheless he suffered soon after from a very acute attack of œsophagitis, and from that time till admission dysphagia steadily increased; so that when he came before you for the first time he could only take fluid or semi-fluid food. On

introducing a bougie a distinct and well-defined stricture could be made out at the level of the bifurcation of the trachea. The treatment resorted to was gradual dilatation, which has been so successful that by the end of the year the patient only required an instrument passed once a month in order to enable him to swallow with perfect ease.

CASE 12.—The last case of well-defined organic stricture of the œsophagus you saw was D. McA——, aged fifty-one. He was admitted to the ward on Jan. 20th, 1891, complaining of great difficulty in swallowing, of seven weeks' duration. He states that seven weeks previous to admission he swallowed by mistake for whisky a burning liquid said to be vitriol. Indeed he had been in the habit, as a railway porter, of seeking for whisky in "returned empties," and on that particular occasion he failed to distinguish the nature of the contents of the jar until it had burned his throat, tongue, and mouth so severely that, as he says, "a skin peeled off those parts." Immediately on finding out his mistake he swallowed a large quantity of cold water, which was at once vomited, and he describes the vomited matter as being very acid in taste and consisting of "phlegm and a skin." For a fortnight after the accident he suffered from acute inflammation of the mouth and œsophagus, and the only food he took was milk and soda-water. On admission he was able to take semolina and milk, but was quite unable to swallow any solid food. On passing a bougie a long narrow stricture was found, extending from the level of the cricoid cartilage to the bifurcation of the trachea. The introduction even of a small instrument was attended with great pain and spasm. The patient was therefore fed exclusively per rectum for ten days, no food being given by the mouth, and no instruments were introduced during that time. After rest for these ten days a successful attempt was made to pass a No. 8 bougie, and two days thereafter a No. 9 was easily introduced, and so on; every second day a larger size was passed until a No. 17 was got through the stenosis. By this time the patient was able to take solid food with freedom, and was soon after dismissed, but he still comes to the hospital once a week to have a bougie introduced.

(To be concluded.)

THE BEARING OF RECENT BIOLOGICAL RESEARCHES ON THE PRACTICE OF MEDICINE AND SURGERY.

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(Continued from page 131.)

IT has often been suspected that bacteria from imperfectly sterilised skin surrounding a wound which an attempt has been made to keep aseptic were accountable for the putrefactive and septic changes that are specially prone to occur in wounds of certain parts of the body. Lister and Watson Cheyne have both insisted that this may occur, and other surgeons have arrived at the same conclusion. So important has this question become that Geppert and several workers in the Johns Hopkins University pathological laboratories have paid considerable attention to the methods of sterilisation not only of the hands of the operator, but of the skin surrounding any incision or wound. I have also carried out a number of experiments with the view of determining how far the various methods of sterilising the skin are efficacious.

Let us consider the enormous number of micro-organisms that have been described as occurring in the skin; Eisenberg[1] describes about thirty; whilst, counting all those that have been described by various observers, the number amounts to something over one hundred. These organisms have been found in and beneath the dead epithelium, around the hairs, and, more important still, embedded in the fatty material of the sebaceous ducts and follicles, and it is often a matter of the very greatest difficulty to wash away even a small quantity of the organism-holding substances. It is a matter for little wonder, therefore, that with merely ordinary precautions suppurating points should occur where stitches have been introduced, or even at the lips of the larger wound itself. Many of these organisms, of course, have little or no effect in producing suppuration; but, as we learn from those who are specially interested in the study of skin diseases, the staphylococcus pyogenes albus and the staphylococcus pyogenes aureus and certain other pus-producing organisms are very frequently met with in the skin, and under certain conditions play a very important part in the production of pustular eruptions. I myself have frequently separated from the cloudy serum of herpes vesicles both of the above forms; whilst only the other day I was told by Dr. Eddowes that previous to the examination of a patient suffering from an impetiginous eczema he had wrenched one of his nails slightly from the matrix. He examined the patient, washed his hands carefully, but took no special antiseptic precautions, with the result that a small abscess formed very rapidly, from which he obtained an almost pure culture of staphylococcus pyogenes aureus. These organisms, then, present in the skin may be the cause of some of the unexplained suppurations that now and again occur. I should here like to point out that even this danger may be guarded against by the use, first of all, of a liberal application of soap and warm water, followed by a good scrubbing with a mixture of alcohol and ether, and then by the use of some ethereal antiseptic before the operation is begun.[2]

As yet, however, there is not a practical method of keeping the skin perfectly aseptic for any lengthened time, and for this reason any method of dressing that allows of free evaporation of moisture from the cutaneous surface will probably give better results, in some cases at any rate, than where the moisture is kept in and has to pass over a considerable surface before it comes in contact with the atmosphere. Welch[3] and Halsted maintain that many of the small stitch suppurations are due not to tension, but rather to the presence of a staphylococcus, which they speak of as the staphylococcus epidermidis albus, which is very frequently present in the skin, an organism which is assumed to be very like, though probably not identical with, the staphylococcus pyogenes albus; there can be little doubt that in some cases at least this or some similar organism is accountable for the suppuration that is set up.

On the other hand, Surgeon W. Grant Macpherson, A.M.D., in a series of experiments carried on with what were supplied as aseptic sutures, has shown that even in the hands of the best instrument makers aseptic sutures contain various micro-organisms, and he maintains that the organisms in these sutures may in some cases be accountable for the small stitch abscesses that occur around wounds. So frequently has this occurred that some surgeons have recommended the use of deep sutures, first of all to take the strain off the superficial stitches, and more recently because it was thought that the abscesses were due to the presence of pyogenic organisms in the skin around the sutures, along which, as the distance was short, the organisms could readily pass to the main wound. Of course it is only in exceptional cases that we have to deal with such points; but the exceptional cases are those which present most difficulty, often taxing to the utmost the skill and ingenuity of the surgeon; and the more these exceptional cases can be brought under general rules for treatment, the greater will be the improvement in surgical treatment, and especially in conservative surgery.

I have already spoken of the invasion of the blood and of the tissue by micro-organisms from the alimentary canal and from the respiratory tract. As there are as many organisms described in these positions as on the skin, it is not to be wondered at that surgeons have often suspected the entrance of organisms into their wounds by these tracts. There have been at least one hundred organisms described by different observers

[1] Bakteriologisch Diagnostik. Hamburg and Leipzig, 1891.

[2] The want of knowledge of the difficulty that is involved in this cleansing of the skin has on several occasions led to very erroneous conclusions, especially where attempts have been made to isolate the organisms associated with special diseases, the mistakes made in two series of observations (at least) depending on imperfect cleansing of the skin where it has been necessary to obtain blood or fluid through punctures of the skin, and we are compelled to come to the conclusion that some of the so-called scarlatina and leprosy bacilli are nothing more than forms of bacteria that are frequently found in the skin under perfectly normal conditions.

[3] Loc. cit

as being found at some time or another in the mouth alone, whilst others have been found under different conditions in different parts of the alimentary canal and in the lungs. So important a part do they play that it is now maintained that the ring of lymphoid tissue at the upper end of the pharynx, the most highly developed part of which is the pharyngeal tonsil, is placed specially to act as a kind of defensive outwork to prevent the entrance of a large number of micro-organisms that are present in the mouth; whilst it is further maintained that the lymphoid tissue so universally present throughout the alimentary tract is placed there for a similar purpose. Whilst these are acting normally no micro-organisms can make their way into the tissues, but once this tissue is removed, or by disease is rendered incapable of doing its work, the entrance of micro-organisms is allowed, and if the tissues are below par, or if there are dead tissues at any point in the body, an abscess may be the result. To indicate the importance of this, "the first line of defence," one has only to recall cases resulting from necrosis or suppuration of the pharyngeal glandular tissue in scarlet fever, diphtheria, and similar diseases, conditions which are often followed either by acute septic poisoning or by regular pyæmic conditions; or those cases of enteric inflammation where there is destruction of the lymphoid tissues—a condition which is so frequently followed by similar septic and pyæmic conditions. It may be accepted as a general rule that in no surgical cases should bacteria or their products be allowed to remain unchanged for any length of time in the alimentary canal. The older surgeons had great belief in the use of purgatives; it was said that purging was an antiphlogistic treatment, and so it is. Not only are the effete products of the body removed, but the bacteria and their products which flourish in this effete matter are also got rid of by judicious purgation. On the other hand, it must be remembered that any over-stimulation of the intestine exhausts the cells and so weakens them as defensive agents. Whilst on this subject, though it properly comes in under the next heading, it may be pointed out that the maintenance of the excretory organs in good working conditions is one of the most important elements in the success of antiseptic surgical treatment. Even from the point of view of the most ardent believer in phagocytosis this will be admitted; whilst those who believe in the microbicidal action of the fluid elements of the serum will be equally ready to accept it. Not only do the effete substances of the tissues, if retained for any length of time, exert a poisonous action on the tissues themselves, but all poisonous products of certain bacteria formed within the body, and certain poisonous substances taken into the body from without, are all excreted in the same manner; for instance, if cholera poison is injected subcutaneously or intravenously, hæmorrhages will be found to occur in parts of the alimentary tract; whilst following the exhibition of other poisons, although no regular hæmorrhages occur, intense congestion is found, and the poisonous substance is found in the alimentary canal, showing that in both cases an effort has been made on the part of the organism to get rid of the poison by the ordinary excretory channels. This being the case, it is of the very greatest importance that the intestinal tract especially should be kept free from accumulations of effete matter: first, in order that such matter may not be reabsorbed; and secondly, to allow of a free passage outwards of any substance which may interfere (*a*) with the free action of the leucocytes and of the other cellular tissues, and (*b*) with the normal constitution of the fluids of the body.[4]

The third factor in antiseptic surgery is the cultivation of the *vis medicatrix naturæ* by which the tissues are to be placed under the best possible conditions, so that the phagocytes or the blood serum may exert, to the full, their special protecting powers. As is well known, anæmia (where the quantity of blood is small, or the blood is vitiated) may be a powerful factor, indirectly, in the production of pyæmic and septic processes, and any method of preventing the loss of blood, short of depriving the tissues of their blood-supply for lengthened periods, is of direct assistance to the surgeon who wishes to keep his wounds aseptic. Similarly, good ventilation acts not only directly in interfering with the growth of pathogenic or pyogenic organisms from wards, but also by improving the general health of the patient; whilst good nutrition and efficient excretion, as already mentioned, play an equally important part in maintaining the resistant powers of the tissues or of the cells of which they are composed. There can be no doubt that this element of tissue nutrition had been early grasped; and Sir James Paget, from his enormous experience and keen observation, came to the conclusion thirty years ago that septicæmic patients treated in the open air, in tents, stood a far better chance of recovery than those treated under ordinary conditions; whilst in our own time physicians who have ordered their patients suffering from phthisis to live out in the open air as much as possible—as, for instance, in Egypt, or camping out in the Adirondack—have obtained better results than by any other method of treatment. In all cases the object is so far to nourish and strengthen the tissues that they are able to carry on their functions, to destroy and eliminate invading organisms and their poisons, and under stimulation to form new organising tissues instead of undergoing retrogressive and degenerative changes.

Lastly, in antiseptic surgery it is necessary to remove and keep from the region of the patient, from dressings, from the instruments used—in fact, from everything which may come in contact with the wounded tissues, from the hands of the surgeon downward—all organic and other matter which might possibly harbour putrefactive or septic germs. The first end may be obtained by thorough cleanliness and the use of hot water and alkalies, either in the form of soaps or lyes, to get rid of all fatty or other organic matter which may have accumulated. (It must be remembered, however, that where blood or other albuminoid substance is present careful washing with cold water will be much more effective than when hot water is used.) It is a somewhat difficult matter to apply moist heat to instruments because of the difficulty of preventing rust in the presence of moist air maintained at a high temperature; whilst, on the other hand, if dry heat be employed, a temperature of 150° C. is necessary for the destruction of spores in the dry condition, and this plays such havoc with the handles of instruments that even those who have appreciated its other advantages have been compelled to relinquish its use. Now, however, many sterilisers, in which steam is used for this purpose, have been perfected.[5] The greatest attention should also be paid to the cleansing and disinfecting of the hands of the surgeon, and here it may be pointed out that any amount of washing with chemical antiseptics cannot take the place of soap and water and other material used for the removal of dead epithelium and sebaceous or other fatty material, both of which, as we have seen, form such a favourable nidus for the harbouring and development of micro-organisms. As regards ligatures and sutures, from observation of a large number of experiments carried on by Surgeon Macpherson, I am satisfied that many of the so-called aseptic ligatures are thoroughly unreliable, and that such a substance as silk, for instance, is a better ligature before it has been treated by special methods than afterwards, from the simple fact that the men who use perfectly good methods of sterilisation do not understand the object to be attained, and therefore introduce some slight modification or manipulation of their own which vitiates the whole process. I agree, therefore, with those surgeons who hold that, in order to obtain good results, ligatures should be prepared under the supervision of the surgeon himself or of someone in whom he has the utmost confidence. It is for this reason that those who use boiled silk or pure silk direct from the hands of the manufacturers by whom the fibre has been submitted to the action of most powerful chemical substances, such as acids, chlorine, &c., often obtain better results than where special antiseptic substances have been used. As regards sponges, the difficulty of getting nurses and dressers to pay strict attention to the directions given for sterilising and keeping

[4] It was supposed at one time that these hæmorrhages found in cases of acute poisoning were due to the direct action of the poison on the mucous membrane as it passed from the stomach and along the alimentary canal, but it has now been proved that these poisonous substances are frequently absorbed in the first part of the alimentary canal, and that they are again excreted lower down, where they give rise to the conditions above described.

[5] Of all those I have seen tried, the most convenient and at the same time one of the best and most economical is that devised by Mr. C. W. Cathcart, F.R.C.S., of Edinburgh. Instruments cleansed and heated therein and then placed in a tray containing weak carbolic acid solution may be used without fear of their bringing any contamination to the wound.

them sterile are so great that I believe the plan now adopted by many surgeons of using pledgets of cotton wadding which have been wrapped up in paper and subjected to a dry temperature of 150°C., and then wrung out in dilute antiseptic solution, is preferable to any other that has been suggested.

When we come to the consideration of the dressing of the wounds and of keeping the surroundings of the wound aseptic during operation, another factor enters into our calculations; a dressing must be aseptic in order that nothing coming in contact with the wound may introduce septic material, but to be a perfect dressing it must also be permeated with a quantity of an antiseptic substance sufficient to saturate the fluids which come from the wound through the dressing, and to render these albuminous fluids when they arrive at the surface incapable of serving as nutrient media for the growth of organisms. For this reason, and from experience of a considerable number of cases both in wards and in experimental work, I am satisfied that the very best results are obtained where the following points are attended to—viz., a dressing should be as absorbent as possible; all material used in its manufacture should be thoroughly sterilised; it should then be impregnated with a soluble antiseptic; it should be of sufficient thickness to absorb in its deeper layers all fluid discharge; and it should be changed or added to whenever the discharge comes near the superficial layers. Evaporation should be allowed to go on freely from the outer surface in in order that the moisture, without which organisms are placed at a great disadvantage both as regards development and power of movement and facilities for transportation, may be carried off, in order that the conditions of healing under the scab may be approached as nearly as possible under these artificial conditions. It is, at this date, scarcely necessary to point out that everything around the patient during an operation should be perfectly aseptic, and should be so saturated with antiseptics that when an instrument is laid down it will not be contaminated, and that anything settling thereon shall not only be acted on by the antiseptic, but shall be prevented from making fresh excursions during which it might possibly reach the wound. If these points are attended to, flushings and sprays may be of little additional use; but we must bear in mind that both these agents help in no small degree to the keeping up of those antiseptic surroundings which are so important a feature in the successful treatment of wounds. Of course it has been objected, and will be objected, that many surgeons are able to obtain a large proportion of successful results without the use of antiseptics; some even maintain that antiseptics do more harm by their presence in the tissues than they do good outside; and so they may when not properly used, though against those who understand the principles of antiseptic surgery this is a reproach that can never be substantiated. Those who disavow antiseptic surgery frequently use, without exception, one of the most potent antiseptic agents that we have at our command—heat; they heat their instruments most carefully, and many of them boil the water used for cleansing and flushing purposes. They are also impressed with the necessity there is for cleanliness, for very fortunately no school of surgery can claim a monopoly of this; the only claim that antiseptic surgery can make on this head being that it makes a demand for a more detailed cleanliness than does any other school. As regards damaging the tissues and interfering with their antiseptic powers, many of our brilliant operators who do not believe in antiseptic surgery, undoubtedly reduce this to a minimum, and thus in comparatively healthy operation cases obtain favourable results, and with less suppuration than where antiseptic substances are introduced into the wound, irritating the tissues and impairing their vitality. There is no system of aseptic surgery which is not based on the use of antiseptics in some form or other, and the more completely we recognise this principle, however we may have to modify the methods and detail (discarding the term aseptic as too narrow and incomplete), the more satisfactory will be the results obtained.

(To be continued.)

WELLINGTON COLLEGE.—Owing to the present insanitary condition of Wellington College the next term will be carried on at Ilfracombe, where it is contemplated to secure two large hotels for the accommodation of the staff and students.

CASE OF A BRONCHIECTATIC ABSCESS DUE TO THE IMPACTION OF AN O'DWYER'S TUBE.

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AT the end of March, 1891, P. P——, male, aged seventeen years and a half, came to me with the following history. On the previous day he had been walking behind a van which tilted over on one side owing to a wheel getting into a rut, and a projecting piece of wood struck him on the front of the neck and the under surface of the chin. He had had pain in the throat since and some difficulty in swallowing. There was a small cut through the skin over the lower surface of the symphysis menti, but no other mark of injury. A week later the pain was more severe, and was referred to the region of the thyroid cartilage. There was tenderness on pressure over this area, and the voice was husky. The temperature was 101°, and a cough had set in accompanied by mucoid expectoration. A week later he was much worse. The breathing was loud, quite audible across the room, and was evidently due to some tracheal obstruction; a slight laryngeal stridor was also present. At times there were suffocative attacks, especially during the night. The temperature continued between 101° and 102°; the cough was frequent, of a very exhausting type, and there was expectoration of frothy mucus in large quantity. Sweating was frequent. There was nothing abnormal found in the lungs, heart, or other organs. He was sent to a general hospital, where laryngotomy was performed on the morning after admission, with partial relief to the dyspnœa. His condition remained very critical for some weeks, but eventually the laryngotomy tube was removed, and intubation of the larynx was employed for the relief of stenosis, which had supervened. During a fit of coughing the string attached to the tube broke, and the tube passed down into the trachea. Several efforts were made to remove it, but unsuccessfully, and he became an out-patient at the end of July.

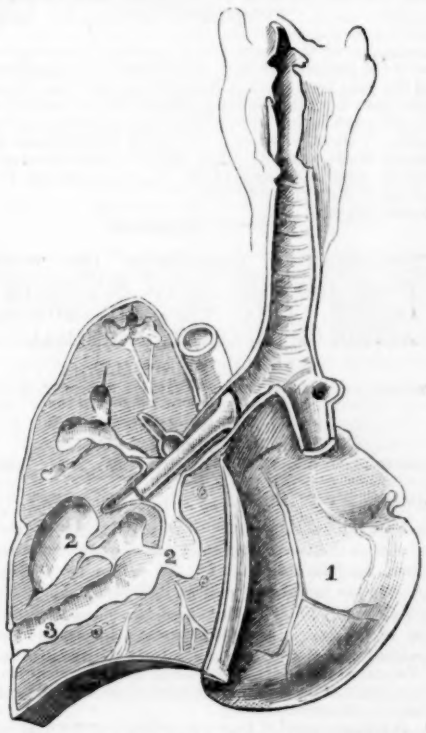
On August 14th he came to me again. He had been at the seaside for ten days, had put on flesh rapidly, and was looking strong and robust. The breathing was loud, of a combined laryngeal and tracheal type, quite audible across the room, and louder after exertion or coughing. The voice was very husky. He had a frequent cough, accompanied by expectoration of pure pus, sometimes amounting to fifteen ounces per diem, not offensive, and in which no tubercle bacilli could be found. Laryngoscopic examination showed marked narrowing in the region of both the false and the true vocal cords, the latter forming a small oval aperture which did not increase or diminish in size during respiration. The anterior end of the opening lay rather to the left of the middle line. As regards the chest, the respiration was regular and easy; expansion was equal and good on both sides; the note was hyper-resonant all over; the breathing was loud blowing, evidently conducted from the upper air passages, and more marked on the right side; and a few scattered râles were occasionally heard. The only evidences of acute mischief were the coughing, which was at times accompanied by attacks of dyspnœa, and the profuse expectoration of pus. Apart from these, he expressed himself as being in the best of health, and was out in the open air the whole day when the weather was favourable.

On my return to town on Sept. 23rd, I found him to be much worse, and obtained the following history: Until fourteen days ago he had continued very well, when he was seized at night with a violent fit of coughing which lasted three hours. During this attack he felt something move in his chest, and the breathing suddenly became quiet. He had not been out of bed since, and had lost flesh rapidly. The cough had been more constant, with profuse purulent expectoration, sweating, and sometimes sickness. The decubitus was entirely dorsal. If he sat up or lay on his right side violent continuous coughing set in; if he lay on the left side, he felt as if his heart were stopping. The breathing was very much quieter, with the tracheal

element quite gone, and, after coughing, rather wheezing in type. The voice was husky as before. The temperature was 102°, and there was much sweating at night. There was some flattening and drawing in of the left side of the chest, specially marked in the axilla, and expansion was very much diminished on the same side. He stated that he had felt something move in his chest on the left side, slightly to the left of the sternum and about three inches from its lower end. He had pain occasionally in the same spot still. There was a distinct wave of pulsation over the whole cardiac area with each beat, and the apex was felt in the fourth intercostal space, just outside the nipple. Over the whole of the left side of the chest there was dulness, well marked, with bronchial breathing which was most intense over the upper lobe, No accompaniments were heard, and vocal resonance was slightly increased. The right lung was hyper-resonant on percussion, and the breathing was harsh vesicular, with occasional rhonchi. The general symptoms continued, and further examination of the chest showed loud blowing breathing at the inferior angle of the left scapula, with metallic râles and whispering pectoriloquy. Dr. Leonard Guthrie kindly saw the case, and diagnosed a bronchiectatic cavity in the lower lobe of the left lung. The expectoration was intermittent; at times a large quantity of pus would be brought up with severe paroxysms of coughing, and there would be a cessation of both expectoration and cough for some hours. He continued to lose flesh and strength. The expectoration at times was very fetid; the temperature was very irregular, often up to 101·4°; and operation was decided on. As he absolutely refused to go into hospital, Mr. H. L. Lack kindly undertook to operate at the patient's house. On Oct. 10th, the patient being under chloroform, Mr. Lack resected three inches of the sixth rib on the left side in the axillary region. On opening the pleura a very small quantity of clear fluid escaped; the lung was very collapsed, and there were no pleural adhesions around the opening. It was resolved accordingly to wait until adhesions had formed. On the 19th the patient was again chloroformed, and Mr. Lack proceeded to explore the lung. Having made a small slit through the visceral pleura, he introduced an aspirating needle in different directions. On passing it backwards some offensive pus was obtained, and on enlarging this opening he was able to introduce his finger into an abscess cavity. It seemed to pass backwards and upwards, but extended beyond reach of the finger. No foreign body could be felt with the finger or probe. The cavity was packed with cyanide gauze, as was also the pleura around the wound, the recent adhesions having given way under manipulation. There was very little bleeding, and the patient stood the operation well. On the first dressing, a large drainage-tube, four inches long, was introduced into the abscess cavity. The temperature improved after the operation, and remained under 100°. The drainage was good, and the expectoration and cough were very much lessened. Mr. Lack again examined for a foreign body in the lung, but failed to find any. On the 30th there was some hæmorrhage into the dressing, and the cough was more troublesome owing to a bronchitic attack. There was very severe hæmorrhage from the lung on removing the drainage-tube three days later; and on Nov. 7th, while he was lying quietly in bed, the bleeding recurred, and proved fatal almost immediately.

A post-mortem examination was made on the following day. There was marked stenosis of the glottis, with congestion all along the trachea, but no marks of injury or abscess apart from the cicatricial tissue at the site of the laryngotomy wound. The right lung was much hypertrophied, somewhat emphysematous, and passed well over to the left of the middle line. On the left side there were pleuritic adhesions round the lung, very firm around the upper lobe and the base of the lower. The left lung was very small and dark in colour. On opening the left bronchus an O'Dwyer's tube was found (size No. 3, length two inches and a quarter), the head lying three quarters of an inch below the bifurcation of the trachea, and the body passing down into the bronchus leading to the lower lobe. On passing a finger into the operation wound, it entered directly a large cavity in the lower lobe, and touched at the upper part the inferior extremity of the O'Dwyer's tube. The greater part of the lower lobe was destroyed by the abscess, and the part remaining was collapsed and airless. The abscess was smooth at the upper part, the wall of which was formed of the dilated bronchus, and soft and irregular in the lower part; the smaller bronchi around were dilated and surrounded by soft and easily broken-down lung tissue. The tube was lying free in the bronchus; and on removal it was seen that the head had eroded through the bronchial wall, and was separated from the pulmonary artery by a thin layer of fibrous tissue. The left upper lobe was collapsed and solid. The bronchus leading to it was blocked by the side of the tube, which lay immediately over it, and the smaller bronchi were dilated. The abscess cavity and upper air passages were filled with blood, but the exact site of the hæmorrhage could not be determined. The other organs presented no special points of interest.

On looking at the above case in the light of the post-mortem evidence some of the difficulties are cleared up, but others still remain. The original injury, trifling to all appearance, was followed by pharyngitis, laryngitis, and tracheitis, accompanied by cough, dyspnœa, and profuse mucoid expectoration. What was the lesion? On surgical examination, nothing abnormal was found about the region



Vertical transverse section of left lung, viewed posteriorly, showing the tube *in situ*. 1, Heart. 2, Bronchiectatic abscess. 3, Track of operation wound.

of the neck. There was no evidence post mortem of sufficient disease in the upper air passages to produce these symptoms. Dr. Lees has suggested to me that there might have been an injury to the vagus or its branches at the time of the accident. This, along with a traumatic inflammation of the larynx and trachea, seems the most probable explanation. The lesion of the vagus or its branches would explain the profuse exudation of mucus into the larynx and trachea, where, even after laryngotomy, it accumulated to such an extent as to threaten the patient's life, and necessitated on more than one occasion the use of artificial respiration. The audible breathing, which came on about a fortnight after the accident, was evidently due to tracheal obstruction, being of the type most commonly heard in connexion with aneurysm of the aorta. It persisted after laryngotomy was performed, and was probably caused by the accumulation of viscid mucus in the trachea. Another point of interest is that for

three months the O'Dwyer's tube lay in the air passages without causing any symptoms by which its presence could be recognised. When he was sent out of hospital, the entire absence of any sign of it, after a most careful examination of the chest, led the authorities to believe that it had been coughed up and swallowed; and when he came to me a month later the chest condition was the same, and it was only from the purulent expectoration, the cough, and the loud breathing that I concluded that the tube was still there. Where was the tube at this time? I believe it was in the trachea. In support of this view there are the following facts:—(1) The audible breathing, the source of which could be localised by auscultation in the trachea; (2) the entire absence of signs pointing to its presence in a bronchus; (3) the sudden cessation of the loud breathing, which never recurred, after a severe fit of coughing; and (4) the onset immediately after of signs pointing to a block in the bronchus and collapse of the lung. On the other hand, it must be stated that in hospital the trachea was explored through the laryngotomy wound both by the finger and a probe, and that inversion was employed, with, in all cases, a negative result. As regards the operation, Mr. Lack proposed the resection of several ribs so as to allow of a thorough examination of the lungs, but I considered that the weakness of the patient was such as to render this unadvisable. Had the tube been reached through the operation wound, it would have been impossible to remove it by the same route without great danger of rupturing the important adjacent vessels. I have to express my great indebtedness to Dr. Leonard Guthrie and Mr. H. L. Lack for their generous and valuable assistance, and to Dr. H. G. Adamson for the drawing of the above engraving.

Carlton Hill, N.W.

EXPERIMENTAL RESEARCH ON TINNED PEAS, GREENED WITH SULPHATE OF COPPER, AND THE PHYSIOLOGICAL ACTION OF THIS SALT ON ANIMALS.

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AND
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WE received for the purpose of this research four tins of peas from the sanitary authorities of Glasgow on Dec. 1st last, and on the same day commenced our examination of these on the following lines: 1. To determine that copper existed in the samples of peas we had obtained. 2. To find out their digestibility when placed in solutions similar to those of (*a*) gastric and (*b*) pancreatic juices, and also the digestibility of albuminate of copper in the same solutions. 3. To ascertain the physiological action of sulphate of copper on animals. Under these headings we will now give details of our experiments.

1. A tablespoonful of peas was taken from a tin which had been kept for ten minutes in boiling water and placed in a glass mortar. They were then acidulated with a little hydrochloric acid and crushed to a pulpy consistence by a glass pestle. The mass was then transferred to a platinum crucible and a zinc rod inserted through it, so as to touch the bottom of the crucible. A distinct deposit of copper was observed on the crucible, when, after the expiration of four hours, it was emptied and washed.

2. A tablespoonful of peas from the same tin, after being masticated, was placed in a glass vessel containing 4 oz. of water. To this were added 0·7 per cent. of pepsin and 0·2 per cent. of dilute hydrochloric acid. A tablespoonful of peas from the same tin was also masticated, placed in a vessel containing the same quantity of water, and to this was added a solution of pancreatin and carbonate of sodium. Both vessels were put on a sand bath and a uniform temperature of 99° F. maintained. At the end of an hour in the case of the gastric solution, and after an hour and a half the pancreatic solution was tested for peptone by the biuret test. In both cases a distinct red colour was observed, thus showing that digestion had taken place. A control experiment, in which no digestion had taken place, similarly tested, showed only a violet colour. The filtered fluid from the gastric solution was tested for copper by the insertion of a steel knife. After three hours this was taken out, and a distinct deposit of copper was observed on both sides of the blade. Mr. Tatlock, analyst for the city of Glasgow, testifies "that when an ounce of coppered green peas in a solution of ten grains of a peptonising powder and ten ounces of water is digested, the copper is dissolved out to the extent of 0·52 grain per lb. of the peas, which is equal to 2·05 grains of crystallised sulphate of copper." Mr. Clarke's analysis indicates a similar result. Doubtless sulphate of copper, however administered by the mouth, forms in the stomach an albuminate of copper which is rendered soluble by the digestive process. Yet as some strong statements have been made denying the possibility of this occurring, we now resolved to try the digestibility of an artificial albuminate of copper made (*a*) from white of egg and a weak solution of sulphate of copper, (*b*) made from curdled milk and a weak solution of sulphate of copper. These albuminates were dried, and a piece of each about the size of a lentil was placed in (α) solutions of pepsin and hydrochloric acid, (β) solutions of pancreatin and carbonate of sodium. The solutions were placed on a sand bath, and a temperature of 99° F. maintained.

Egg albuminate of copper.—Evidence of digestion commenced almost immediately in the acid solution, the blue colour first gradually disappearing, and at the end of one hour and ten minutes the digestion was complete. In the alkaline solution the disappearance of the blue colour was also observed, but the digestion was longer—viz., two hours.

Casein albuminate of copper.—With this albuminate the rapidity of the process was reversed, for it was completed in an hour in the alkaline solution, and at the expiration of two hours in the acid solution. Neither of these albuminates dissolved in strong acids, and this obvious fact has been by some observers brought forward as a test of their insolubility.

3. *Physiological action of sulphate of copper on animals.*—On Dec. 8th a full-grown rabbit was put into a basket, and a piece of bread spread with a paste of albuminate of copper was placed beside it. No other food was given. On the 9th the animal had eaten the greater part of the bread, and we calculated had taken seven grains of sulphate of copper. It was sickly, refused food, and dragged its hind extremities when it attempted to cross the room. The same day it was killed, the liver and kidneys taken out, cut up into small pieces, and two ounces of water and one drachm of sulphuric acid were added to the comminuted organs. Heat was applied for half an hour, and the fluid was filtered. A portion of this fluid was placed in a platinum crucible, and heat was used until the organic matter was burnt off. Strong nitric acid was added to the residue until it became of a pasty consistence, and a distinct deposit of copper was observed on the top of a steel knife which was placed in it. On Dec. 11th a full-grown rabbit was fed with greens over which a solution of sulphate of copper, seven grains to the ounce of water, was sprinkled, the greens being subsequently dried. By the next day the animal had taken the greater part of the greens. It was sickly and refused food, and did not move about easily. On the same day it was killed, and the organs similarly treated as in the former experiment. A copper deposit was also observed on a steel knife placed on the paste after the organic matter had been burnt off, and the residue treated with nitric acid. Into a portion of the filtrate kept for this purpose a needle was inserted, and at the expiration of twenty-four hours a deposit of copper was observed. The needle was again inserted and withdrawn after forty-eight hours, when it was found to be completely covered with copper.

We were, so far, satisfied with the results which accrued from its administration when given to rabbits, as these evidenced its absorption into the system; but as these animals are rather dainty in regard to their food, we resolved to try its action on a pig, which, as everyone knows, will swallow almost anything placed before it. As our time was somewhat limited, we gave sixty grains of the sulphate of copper in milk and meal to a young pig weighing nine pounds; but, contrary to our expectations, the animal refused this food for twenty-four hours. Therefore on Dec. 12th we made a weaker solution (ten grains to the ounce of water), and when this quantity was added to the milk and meal it was taken easily. The same quantity, ten grains, was taken for four days, and then the animal was killed. The liver and kidneys were boiled with water and

strong sulphuric acid, and a knife was placed in the filtrate. At the end of eighteen hours the knife showed, to the extent of its immersion, two inches, a complete covering of copper on both sides. The evidence of experiments 1, 2, and 3 was shown in court and their significance explained to Sheriff Birnie, who tried the case at the instance of the sanitary authority of Glasgow. The evidence for the prosecution and the defence is fully and correctly given in the *Chemist and Druggist*, in its issues of Jan. 1st and Jan. 15th. A careful reading of each shows that the evidence for the defence in no way traversed what we had done, and which was supplemented by such well-known chemists as Messrs. Tatlock and Clarke. Yet, in deciding for the defence, the Sheriff stated that "no new evidence had been brought forward." By his decision he sanctioned the use of a strong irritant metallic poison in food intended for consumption by human beings, the amount of which is not fixed, but is left to the discretion of foreign manufacturers over whom the authorities of our country have no control.

Glasgow.

ON

TWO CASES OF ANTHRAX SUCCESSFULLY TREATED BY EXCISING THE PUSTULE.[1]

BY T. PAGAN LOWE, M.R.C.S.,

HONORARY MEDICAL OFFICER TO THE EASTERN DISPENSARY, BATH.

THESE two cases occurred in March of last year. This is the first time, so far as I am aware, that the disease has been known in Bath.

A man named W——, aged thirty-eight, was first attacked, his wife contracting the disease fourteen days later. I saw him for the first time on March 11th, the seventh day of the disease. I found him suffering from a large malignant pustule on the right side of the neck, about the middle of the posterior triangle. The pustule consisted of a central dark-brown eschar, surrounded by a zone of flattened vesicles, outside of which was an inflammatory zone, the whole of the right side of the neck being enormously swollen and œdematous. The treatment I adopted was that of removing the pustule by an elliptical incision; and this included the whole area of vesiculation, together with a considerable portion of healthy skin on each side and the deep tissues beneath, so as to ensure complete eradication. The wound was freely irrigated with hot perchloride solution, and well dusted with iodoform before its margins were brought together by sutures. The patient made a satisfactory and uninterrupted recovery. Mr. Arthur Barker kindly examined the specimen and confirmed the diagnosis.

Mrs. W——, the wife, aged forty, who was assiduous in her attentions upon her husband, and to whom were entrusted the evening dressings, was attacked by the same disease fourteen days later. In her case the pustule appeared on the cheek. In the absence of proper home nursing I was obliged to send the case into hospital, where the pustule was excised by Mr. Stockwell, and its base freely cauterised. The operation in this case was performed on the fourth day, and was followed by rapid convalescence. In both instances the disease was inoculated by the finger nail, the husband having scratched his neck after washing some buffalo hide, and his wife her cheek after dressing her husband's wound. Both cases suggest that anthrax, when it attacks the skin, may remain local for a considerable time, and produce a mild affection as compared with the same disease when attacking internal organs. The bacilli of anthrax are known to have a marked preference for the superficial layers of the dermis, slowly penetrating into the deeper parts. Nevertheless, it seems very extraordinary that, in the case of anthrax, the excision of the focus of inoculation should arrest the progress of the disease. It may be explained on the hypothesis that the behaviour of the tissues towards the bacillus is very different from that towards most other infective micro-organisms, and an illustration is obtained of one form of tissue resistance. Very valuable information may yet be gleaned from observing more closely the strange sequence of events. One fact may be claimed as having been well established—i.e., that theoretical considerations should never deter anyone from operating, not only during the early stages, but at whatever period of the disease the cases present themselves. In fact, we have on record an ample number of instances in which complete success has followed excision during the later stages. It seems, moreover, that we have in the pustule a manufactory which supplies bacilli in unlimited quantities, and that, when this manufactory is removed, the microphages are well able to cope successfully with any organisms which may have escaped into the blood stream. The bacilli anthracis, although offering powerful resistance to cold and to strong solutions of carbolic acid, are quickly destroyed by low degrees of heat, a temperature of 120° F. being amply sufficient for the purpose. The disease in many localities is sufficiently common and dangerous to warrant legislative interference to prevent the importation of hides, except on the condition that, prior to distribution, they undergo a process of heating at, say, 120° F., for a given length of time. This process, whilst it would effectually stamp out the disease, would in no respect prejudice the commercial interest involved.

Bath.

[1] A paper read before the Bath and Bristol Branch of the British Medical Association, Oct. 28th, 1891.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

RUPTURE OF THE DUODENUM.

BY R. HEELIS, M.D. DURH., L.R.C.P.L.

RUPTURE of the duodenum is said by Mr. Morris in Treves's Surgery to be of rare occurrence. Out of sixty-four recorded cases of ruptured gut only four were in that situation. Erichsen, on the other hand, considers it the most common position for a rupture, and accounts for this, first, by the fixity of that part of the gut and its consequent inability to escape pressure against the spine; and, secondly, by the fact of its not being protected by the costal cartilages. Bryant says rupture of the duodenum is very rare, but that it is most common at the upper end of the jejunum, on account of its fixture to the duodenum. In view of this diversity of opinion, a report of a case of rupture of the duodenum which I have recently examined may be interesting.

On July 23rd, about 3.30 P.M., a boy aged sixteen years, employed at a neighbouring colliery, whilst playing about on the bank was caught between a post and a tub drawn by a horse, the side of the tub hitting him in the right loin and forcing his abdomen against the post. In his belt he wore a bull's-eye lantern which caught against the post and was doubled up by the force of the collision, and driven against his abdomen and right groin. He fell down screaming with pain, and after having been given some brandy-and-water was driven home. I did not see him until three or four hours after the accident, when I found him lying in bed on his left side with his legs drawn up, groaning. He was not collapsed, and had a steady pulse; the abdomen was rigid and concave; there was a slight swelling in the right groin; no bruise in the loin or over the abdomen. He had vomited once before I saw him, there was no blood in the vomit; he had also passed urine, which did not contain blood. The principal tenderness was just above the right groin. He was given full doses of opium, under which the pain disappeared to a great extent.—July 24th: Had passed a fairly good night, but had vomited once or twice. On my visit I was surprised to find him downstairs, and still more so to hear that he had walked down. His pulse was good; his abdomen not distended; chief tenderness above the right groin as yesterday. Vomited bilious matter during the day, but ceased vomiting after he had had some ice. During the following night he died comatose, thirty-seven hours after the receipt of the injury.

Necropsy, thirty hours after death.—Advanced decomposition. The abdomen was greatly distended; there were gas in the abdominal cavity and some extravasation of blood between the muscles in the right loin. The peritoneal cavity contained a small quantity of bloody serous fluid and the intestines were not adherent or lymph-coated. The small intestines below the duodenum were removed in order to

get a view of the seat of injury. The colon, where it was in relation with the duodenum, was constricted for three or four inches and slightly bruised. Between it and the duodenum there was an oozing of bile-stained fluid through several small holes in the peritoneum, and on removing that membrane from the front of the bowel a large rent was revealed at the junction of the second and third portions on the right side of the second lumbar vertebra, involving fully two-thirds of its circumference. The edges of the rent were ragged and the bowel was bruised for about two inches above it.

The noteworthy points about the case seem to be the slight amount of shock in proportion to the gravity of the injury, and the delay in the setting up of severe general peritonitis. They are both explained by the fact of the rent being retro-peritoneal, the small holes in the peritoneum admitting only of a small and gradual extravasation of bowel contents. The absence of severe shock may have been also due to the escape from pressure of the great sympathetic ganglia. If the patient had been kept entirely at rest and supplied sooner with ice, I believe he might have survived the injury a good while longer, though the case was beyond the help of even present-day abdominal surgery.

Nottingham.

THE ADMINISTRATION OF CHLOROFORM.

BY ARTHUR COURT, M.B. CAMB.

IN view of the recent lamentable number of deaths from chloroform reported in the medical journals, I wish to bring forward this case of primary heart failure occurring during its administration, thinking it may possibly be of interest to the readers of THE LANCET.

The patient, H. B——, aged thirty, was the wife of a farmer. She had previously enjoyed good health. She had borne four children and was at the time of operation four months pregnant. On Nov. 6th, 1891, she pricked the index finger of her left hand with a rusty pin. This was followed by destructive inflammation of the tendon and metacarpo-phalangeal joint, the inflammation afterwards spreading into the palm of the hand; she had a sharp attack of septicæmia, and it was considered necessary to amputate the useless finger. The temperature having been normal for a week, on Dec. 22nd, at 10 A.M., I attended to give chloroform. She had had no solid food since the previous day, but was allowed some egg and brandy before my arrival. The heart was normal, with the exception of the sounds at the apex, which were remarkably sharp and clear. Pulse 80, small and easily compressible. The patient being placed in the supine position, I proceeded to administer chloroform on a Skinner's inhaler, commencing with half a drachm of chloroform, and after that a drachm of a mixture of equal parts of chloroform and ether. The breathing was regular and deep, and she came under the full influence of the anæsthetic in about three minutes. My father, who was operating, quickly amputated the finger. At the same time she suddenly became blanched, the pupils widely dilated, and the pulse ceased to be felt either at the temples or wrist. The breathing was, however, maintained. My father at the same instant saw that all was not right, for nothing but a little venous oozing escaped from the stump. I immediately hung her head over the edge of the table and pulled out the tongue, and then the breathing ceased. Fortunately I had at hand a hypodermic syringe filled with ether, which was quickly injected. We then took her by the waist and suspended her head downwards, and the colour gradually returned to her face, and the breathing became short and gasping. We replaced her on the table; but she at once relapsed into her former state, and the suspension had to be repeated. Again she rallied, and at last we succeeded in getting her round. The pulse remained very feeble, and she had several severe syncopal attacks during the day. She eventually got quite well.

I have no doubt that in this case the heart was primarily at fault, enfeebled by an attack of septicæmia in a pregnant woman, and that ether should have been the anæsthetic chosen in place of chloroform. I certainly believe that the suspension of the patient was the means of bringing about a satisfactory result.

Staveley, Chesterfield.

A CASE OF DOUBLE INTERNAL STRANGULATION BY THREE ADVENTITIOUS BANDS; ABDOMINAL SECTION; DEATH.

BY R. MUZIO WILLIAMS, M.D. LOND.,
AND
JOHN R. LUNN, F.R.C.S. EDIN.

THE curious condition found at the necropsy of the above case makes us venture to offer a brief *résumé* of it, especially as it illustrates to a remarkable degree the extreme difficulties to be contended against in the correct treatment of these formidable cases—difficulties principally arising from the impossibility of diagnosing correctly the exact anatomical lesions which have caused the strangulation, for they differ in almost every individual so affected.

T. B——, aged fifteen, came under our care on May 9th, 1891, with the following history:—He had always enjoyed good health until a fortnight ago, when he was attacked with severe diarrhœa, great abdominal pain, and frequent vomiting. He said that the attack commenced very soon after he had carried thirty-two rolls of paper (42 lb. weight) a distance of four miles. On first being seen the patient proved to be a well-nourished boy. The face showed great signs of suffering. Pulse small and rapid; temperature subnormal; pupils dilated; legs drawn up; abdomen much distended and tympanitic on percussion; some feeling of resistance in the right iliac fossa (the bowels had not been opened for two days); vomiting after all food. By May 12th the patient had become much worse in spite of treatment. Bowels still obstructed; vomited matters now dark brown. A distinct swelling could be felt in the right iliac region, which moved somewhat on change of position. It was decided that the patient's only chance of life was to make an abdominal exploration. On the abdomen being opened by a four-inch incision, and the much-distended gut being pushed to one side and covered by hot sponges, a broad inflammatory band was noticed passing to the right iliac fossa, all the parts in that region being much matted together; the band was an inch and a half broad and quarter of an inch thick, and was constricting the small gut beneath. On endeavouring with great difficulty to get it free some adhesions gave way, disclosing a collection of pus deep seated amongst the intestines and shut off by by adhesions. Into this pus-containing cavity the gut had sloughed and was very black. The patient having become very collapsed, the ragged opening was hastily made into an artificial anus by being stitched to the abdominal wound. The peritoneum was washed out and the wound dressed in the usual antiseptic way. The patient died the following night. At the necropsy the band noticed during the operation was found to arise from the mesocolon; it was seven inches long and constricted the small gut at a point eight feet from the stomach. About two feet below this was a second band, arising from a portion of the small intestine and passing to the right iliac fossa. It constricted the bowel by causing a sharp bend, and thus helped to form the first strangulated loop, part of which was protruding into the abscess cavity, and was gangrenous. There was a second strangulated loop about a foot in length, situated six feet from the stomach—dark, congested, and slightly gangrenous, with a small sloughing ulcer on its internal surface. It had become pushed beneath a third band, four inches long, passing from the great omentum to the cæcum.

St. Mark's-road, North Kensington, W.

A CASE OF ANÆMIA, CONSEQUENT UPON LUNG DISEASE AND STARVATION, TREATED BY TRANSFUSION OF BLOOD AND SALINE FLUID.

BY JOHN R. PHILPOTS, L.R.C.P. & S. EDIN.

MRS. H——, aged sixty-six, but looking older, first came under my care on Aug. 31st, in a weak and emaciated condition, weighing about 7½ st., and with a history of antecedent lung mischief and hæmoptysis. Her appetite was bad, and became worse, although a variety of different

foods were presented to her. At the commencement of October, 1891, she took only about one pint of milk, one egg, half a plateful of soup, half a wing of chicken, or an equivalent quantity of meat, about a tablespoonful of pudding, three cups of tea, a slice of bread-and-butter, and a teaspoonful of brandy. These quantities were diminished by Oct. 8th, when the pulse was flickering and 98 per minute, the patient refusing to take food. Transfusion of blood and saline fluid was then performed by Dr. C. E. Jennings, assisted by Dr. Masters and myself, the blood being furnished by a son of the patient, a robust man aged thirty-five. The operation was performed after the method described in Dr. Jennings's book,[1] the skin over the veins of the arms of the giver and receiver being cocainised. Twenty-six ounces of saline fluid were used, the major portion being infused into the giver's veins as a substitute for the blood transfused into the receiver. The wounded veins were ligatured with catgut, and the incisions have healed by first intention. As the result of this operation, the giver's face became perceptibly paler in colour, whilst the pallor disappeared from the face of the receiver. Scarcely any pain was felt during the operation by either person, and the giver was talking as though nothing were happening whilst the saline fluid was replacing his blood. After the operation the receiver's pulse fell to 80, and became full and strong, the improvement being maintained. Temperature normal. She is better in every respect, and takes as much food as is offered her now—viz, half a pint of new milk at 7.45 A.M; a breakfast-cupful of bread-and-milk at 9.30 A.M; a teacupful of bovril at 11.30 A.M; a glass of milk with an egg beaten in it, and milk pudding, at 1.30 P.M.; a breakfast cupful of Benger's food at 4 P.M.; a breakfast-cupful of bovril and milk at 6 P.M; bread-and-milk at 8.30 P.M; beef-tea and toast at 10.30 P.M. On Oct. 15th a whiting, instead of milk-pudding, at 1.30 P.M. During the night the patient took a quarter of a pint of egg-and-milk and a tea-cupful of bovril. She walks well and sleeps fairly. Since Oct. 8th five sleeping-draughts have been administered. There are crepitations over the front of the left lung, and tubular breathing posteriorly.

Parkstone.

ORCHITIS FOLLOWING INFLUENZA.

BY J. E. BRISCOE, M.R.C.S.

THE following case is of interest in connexion with that of acute orchitis following influenza, reported by Mr. Harris.[2]

On Dec. 20th, 1891, I was called to a patient, W. W——, aged thirty-two, out-door labourer. He had been ailing for five days, worse the last two, but had continued working up to the afternoon of the previous day. He complained of pain in the joints and back, and had a white coated tongue. Temperature 101·6° F. He had had no headache; and a chronic cough, which had been worse some days before, was now much better. Bowels open; lungs and heart normal. He mentioned that two days previously he noticed pain in the right testicle, and the day before (Dec. 19th) found it swollen. On examination I found it enlarged and tender, but neither so large nor so tender as is often observed in cases of acute orchitis, there being no effusion into the sac, and no epididymitis. In the absence of symptoms or likelihood of gonorrhœa, of history of injury, and of parotitis, I was at a loss to explain the orchitis, except as an unusual but possible concomitant of rheumatism. The patient was ordered to support the scrotum, to take light diet, and given salicylate of sodium in ten-grain doses every four hours.—Dec. 22nd: Patient up; pain in back gone; temperature normal; testicle improving, but still slightly painful on pressure. I omitted the salicylate and gave a mixture of tincture of nux vomica, compound spirit of ammonia, and chloroform water.—27th: Convalescent but weak; all swelling and pain in testicle gone.—Jan. 4th, 1892: Returned to work.

This was, after all, probably a case of influenza, and the orchitis similar to that described by Mr. Harris. The absence of headache throughout (in which he persists) is unusual.

Leeds.

[1] Transfusion of Blood and Saline Fluid. Baillière, Tindall, and Cox.
[2] Vide THE LANCET, Jan. 2nd.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

METROPOLITAN HOSPITAL.

A CASE OF PORTAL PYÆMIA; NECROPSY.

(Under the care of Dr. HOWARD TOOTH.)

THE following case is an illustration of pyæmic infection, the source of which was only discovered at the post-mortem examination, and presented no clue during life. The disease was evidently caused by the suppurating mesenteric glands, and the limitation of the secondary abscesses to the portal system is noteworthy. It is remarkable that no ulceration or other cause for infection was found in the intestines. The case was at first supposed to be one of enteric fever, but the temperature was more irregular and remittent than is usually found in this disease, even in children. The frequent rigors were also against this view. For the notes of the case we are indebted to the house physician, Dr. C. F. Marshall.

Ernest B——, aged six years, was admitted to the Metropolitan Hospital on Oct. 20th, 1891, with a history of ten days' headache, abdominal pain, and rigors. The rigors had occurred several times a day, and were followed by profuse sweating. The bowels had been confined until three or four days before admission, when diarrhœa began.

On admission, the child was pale, and rather wasted. The tongue was red and beefy, with a central glazed strip on the dorsum. Pulse 120, regular, rather small, and dicrotic. Temperature 103·4°. In the lungs were some subcrepitant râles, but no other signs. The abdomen was somewhat distended; the spleen was felt about an inch below the ribs. There were no spots. No albuminuria. There was a soft systolic murmur, apparently functional in character.

The progress of the case was as follows:—

Oct. 25th.—Condition much the same; no further signs or symptoms. Several rigors since admission. Temperature 105°. Diarrhœa. Pulse 104.

30th.—Diarrhœa improved; tongue cleaning. Temperature 101°; pulse 120.

Nov. 4th.—Tympanites. Has lost flesh since admission. Slight jaundice. Temperature 101°; pulse 140.

5th.—Jaundice increased. Tympanites not so great. Liver enlarged and very tender. Spleen unaltered. General condition worse. About 11 P.M. the child rapidly got worse, and died about 1.30 A.M. on the 6th. During the day the breath had a distinct pyæmic odour.

The temperature chart was very irregular, and with frequent remissions. Rigors were frequent during the first week, after this not so frequent.

Necropsy.—The liver was uniformly enlarged and completely riddled with pyæmic abscesses, some of which were nearly bursting on the surface. The branches of the portal vein were full of pus. The mesentery was thickened and all the mesenteric glands much enlarged, resembling the condition in tabes mesenterica, but none of the glands were tubercular. Several glands near the cæcum were suppurating, and one gland near the duodenum was in the same condition. The whole of the alimentary canal was carefully examined for ulceration, but no trace of this was found at any part. There was no sign of typhlitis or perityphlitis, and the Peyer's patches were normal. The spleen was much enlarged; all other organs normal. No abscesses were found in any other part.

LONDON COUNTY ASYLUM, HANWELL.

A FATAL CASE OF ABSCESS OF THE LIVER CAUSED BY THE PRESENCE OF A NEEDLE.

(Under the care of Mr. J. PEEKE RICHARDS, Medical Superintendent of the Female Department.)

THE cause for the formation of the suppuration in the liver in this patient must certainly be put down amongst the rarest of those met with in practice. Lunatics appear to

recover at times from injuries of considerable severity with greater ease than people who are not affected mentally. It is often impossible to prevent the self-infliction of minor injuries such as that described, or to find evidence of them afterwards, and usually they can be inflicted with impunity. This case is evidence of the serious consequences which may ensue, and, curiously, Mr. Richards recorded in our columns last year[1] the account of a case in which the patient died from pericarditis and hæmorrhage into the pericardium, the result of the lodgment of a needle, the presence of which was unsuspected until the necropsy revealed it.

T. G——, aged fifty-two, a widow, was admitted into the asylum on May 4th, 1888, having been transferred here from another asylum, where she had been for a little over a year. She was labouring under chronic melancholia, and had distressing delusions, fancying that someone was going to tear her to pieces. She had hallucinations of hearing, at times keeping up long conversations with imaginary persons. She was very industrious, employing herself at needlework nearly all day long; in fact, if she had no work to do she became very unsettled and used bad language. Nothing unusual was noticed about her until the morning of Oct. 9th, 1891, when she complained of pain under the left clavicle and in the left supra-scapular region. These parts were examined, but nothing wrong was detected. In the afternoon of the same day she told the charge nurse of her ward that on the previous night when she went to bed she had run a needle into her chest, and when asked why she had done so, replied that "she had felt all day whilst at needlework that every stitch she made she ought to have run the needle into herself instead of the work." The circumstance was at once reported to Mr. Richards, and both he and Mr. Holderness examined her, but no trace of a needle could be found, nor was there any mark or spot which would indicate that anything had been inserted into the part where the patient said she had pushed in the needle. She complained of pain on pressure over the fifth left intercostal space, just below the heart. She was ordered to bed in the infirmary, and placed under constant supervision day and night.

On Oct 10th her temperature began to rise, but it did not exceed 100° for six days. On the 17th the thermometer recorded 102°, and it mounted gradually higher and higher until the 20th, when it reached 104°. She complained from the time of her admission to the infirmary of her inability to swallow solid food, as it caused her much pain. On October 20th fluctuation was perceptible over the spot where she always said there was pain on pressure. An abscess gradually formed there, and on the 22nd it was opened, when about four ounces of thick blood-stained pus were let out. The opportunity was then taken of thoroughly exploring the abscess cavity, but no trace of a needle could be found. She appeared to improve for a few days, the temperature dropping slightly, but on the 26th it was noticed that the area of cardiac dulness had increased, and that there was marked dulness over the lower part of the left chest, and increased vocal fremitus over the upper portion. About this time a change was noticed in her mental condition: she developed the delusion that she had murdered her husband, and she became very restless and excited. The abscess continued to discharge pus, and she gradually sank, and died on Oct. 28th, twenty days from the time she said she had inserted the needle.

At the post-mortem examination a needle an inch and three-quarters in length was found embedded in the left lobe of the liver, the blunt end being on a level with the upper surface of the organ. The whole liver was very much enlarged, weighing 87 oz., the left lobe alone weighing 29½ oz. The whole of this portion of the liver was occupied by innumerable abscesses, from the size of a pea to that of a walnut. They all seemed to be distinct and not to communicate with each other, and they contained thick creamy pus. The needle itself was surrounded by one of the larger collections of matter. There were no abscesses in the right lobe, and the left lobe was so enlarged that it extended quite across the abdomen, and came in contact with the ribs on the left side. There was a large abscess cavity over the left lower ribs in the mammary region, and in the fifth intercostal space was a minute aperture communicating with an abscess the size of an orange, situated between the under surface of the ribs and the upper surface of the left lobe of the liver, and communicating through the diaphragm with the abscesses in the liver. The upper part of the left pleura contained a large quantity of clear fluid, which had considerably compressed the lung. The lower portion of the pleural cavity had become obliterated by the adhesion of its costal and parietal pleuræ. The pericardium contained about three ounces of clear fluid.

Remarks by Mr. RICHARDS.—In this case all through I was extremely doubtful as to whether the needle had really been inserted at all, as there was only the patient's word for it; but I thought that perhaps, as frequently occurs in the insane, the woman had experienced some amount of pain in the formation of the abscess in the submammary region, and from this uneasiness she had originated the delusion about running in the needle. I am very doubtful as to whether the act was committed with any suicidal intent; but I am inclined to think that she was prompted to do so by one of those sudden impulses so extremely common in those of unsound mind, and in her case particularly so, as she had well-marked hallucinations of hearing, and may be a "voice" had instigated her to commit the act which caused her death.

[1] THE LANCET, vol. i., p. 1151.

SOUTH DEVON AND EAST CORNWALL HOSPITAL, PLYMOUTH.

SUPRA-PUBIC DISLOCATION OF HEAD OF FEMUR; FAILURE OF ATTEMPTS AT REDUCTION; LATER EXCISION OF HEAD OF FEMUR.

(Under the care of Mr. R. H. HUGHES.)

THE account of this case describes a displacement of the femur which differs so remarkably from the ordinary pubic one as to almost require a separate term to describe it. Instead of the head of the bone lying in one of the usual situations, (*a*) on the pubic bone, or (*b*) beneath the anterior inferior spine of the ilium, it was forced by the blow high up into the abdominal wall, to such an extent that, although the patient was only eleven years old, the amount of shortening exceeded that usually found in the adult by an inch and a half. Such an amount of displacement, permitting as it did both trochanters to be felt from the front, implied a considerable laceration of the soft parts attached to the upper end of the femur, and indicated to some extent the severity of the injury which caused the dislocation. Excision of the head of the femur has not been performed for irreducible dislocation of that bone in many recorded instances. Kirn[1] found only twelve such. Of these, nine recovered and three died. The majority of the operations have been performed on patients the subject of dorsal dislocation, and nothing short of removal of the head of the bone permitted reduction to be effected. For the notes of this case we are indebted to Mr. W. Gifford Nash, late house surgeon.

T. B——, a boy aged eleven, was admitted on Sept. 20th, 1890. He stated that he was running behind and pushing a swinging boat that afternoon when he slipped under it. On its return the boat struck his right knee, dislocating the hip. He was seen by Mr. Hughes, who, with Mr. Lucy's help, attempted reduction under chloroform. This failing, he was brought to the hospital for a further attempt with the pulleys.

On admission there was a contusion over the front of the right knee. The right leg was everted, abducted, and shortened to the extent of two inches and a half or three inches. The head of the bone could be seen and felt lying half-way between the umbilicus and Poupart's ligament. Both trochanters could easily be felt on rotating the limb. There was considerable blood effusion into the soft tissues around the joint. The femoral artery could be felt pulsating on the inner side of the small trochanter. Methylene was given, and reduction again attempted by means of pulleys and manipulation. The head of the bone could not be got below the pelvic brim by any means. He was then put to bed with a weight extension applied to the dislocated limb. In a few days there was widespread ecchymosis over the lower half of the abdomen, scrotum, perineum, and right thigh. Whilst awaiting absorption of the effusion he developed an attack of acute rheumatism, which delayed the operation until

[1] Beiträge für Klin. Chir., 1890.

Dec. 5th, when methylene was given, and an incision four inches long made over the neck of the femur. The head was exposed, and all the ligamentous and muscular attachments to the neck and great trochanter were divided. Traction was then applied without effect. The tip of the great trochanter was found to be separated, and a large amount of periosteum stripped off the back of the femur. At the back of the femur, connecting the shaft with the back of the acetabulum, was an elongated mass of bone, formed by the periosteum which was stripped from the back of the femur. The neck of the femur was sawn through and the head removed. Traction was again applied without result. The wound was then closed. Six weeks later, when he got up, there was two inches of shortening. In July he was seen, and was then able to walk well with a high boot. The hip was quite stiff, and about two inches of shortening present.

Remarks by W. G. NASH.—Not being able to find any record of a similar dislocation, I think this worth recording. The cause of irreducibility was never determined. The head of the femur could be brought down so that the neck rested on the ilio-pubic ridge, but the head itself could neither be dragged nor manipulated over it. The great force which produced the dislocation is shown by the large amount of periosteum stripped off the back of the femur. It was unfortunate that the resection of the head had to be delayed so long, as it gave time for so much new bone to be thrown out, but it would not have been safe to have operated early after the accident, when the tissues were so bruised and full of extravasated blood.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Madura Disease of Hand and Foot.—Ulcerative Endocarditis of Pulmonary Valve.—Toad attacked by Blow-fly Larvæ.—Thrombosis of Splenic Vein associated with Infarcts.

AN ordinary meeting of this Society was held on Jan. 19th, the President, Sir George Humphry, in the chair.

Mr. A. A. KANTHACK exhibited a hand and foot affected with Fungoid Disease. They had both been amputated by Dr. Browning of Madura. There were two varieties of Madura disease: one, the yellow or pale variety, in which in the hollows formed by the disease there were found little yellow particles, looking like fish-roe; and the black, or melanoid kind, in which the hollows were filled with brownish-black masses. The two forms otherwise resembled each other closely in that there were numerous cavities in the soft tissues of the part, the bones likewise undergoing softening. The disease was undoubtedly due to a fungus, and the second, or black variety, seemed to be a degeneration of the first. If portions of the growth were placed in ether or chloroform, and afterwards well washed in caustic potash, small rounded bodies would be left which showed rays under the microscope, and which closely resembled actinomycosis. Outside the ray-like mass was an area of round cells, and this again was enclosed in a fibrous ring. Its reaction to staining was identical with actinomyces. In the black masses the central reticulated structure was present, but the rays or fringes had not been found.—Mr. D'ARCY POWER referred to a specimen of the yellow variety of Madura foot which was in St. Bartholomew's Hospital museum.—Dr. ROLLESTON said there was a foot of the black variety in St. George's Hospital museum, which he had examined, but was unable to make out satisfactorily the structure of the black bodies.—Dr. WHEATON asked if these fungi could be stained by Gram's method; if they could not be so stained they were not actinomyces. Last year he showed a fungus affecting the lung which could not be stained by Gram's method, and which was not actinomyces.—Mr. KANTHACK, in reply, said that the specimen stained easily with aniline dyes. It was quite impossible to stain actinomycosis bovis with Gram's method, unless the saponaceous and calcareous matter were removed. And when actinomyces had undergone degeneration it could not be stained by Gram's method, though this was easily effected by Ehrlich's hæmatoxylin. Black masses of actinomyces had been found in the œsophagus, but their colour was easily discharged by spirit.

Dr. ARNOLD CHAPLIN read a paper on a case of Ulcerative Endocarditis affecting the Pulmonary Valve, taken from a girl under the care of Dr. Sainsbury at the Victoria Park Hospital. The patient was a waitress aged eighteen; she was admitted to the hospital on Aug. 11th, complaining of great dyspnœa and palpitation. On admission she was found to be very anæmic, and the temperature was between 99° and 100° every evening. The pulse was 126, the respiration 30, and the urine natural. On auscultating the heart there was heard at the apex a blowing systolic murmur, conducted round some way into the axilla; and over the pulmonary artery there was a loud systolic bruit, followed by a short diastolic murmur, which was conducted across the sternum to the right. The right side of the heart seemed to be enlarged; the lungs were healthy. On Aug. 25th severe pyrexia set in, the temperature rising to 104° or 105° every night, and this hectic character of the temperature was persistent until the end of the case. On Sept. 1st the spleen was noticed to be enlarged; on the 23rd and several times afterwards the skin became spotted with a petechial rash, which disappeared after a few days. The murmur at the base altered from time to time, sometimes becoming more distinct than at others. On Oct. 14th the patient had hæmoptysis, half an ounce of blood being brought up, and crepitations now appeared at the bases of both lungs. The pulse and respiration increased in frequency, and the patient died on Nov. 11th. At the necropsy the pulmonary artery was found filled with a vegetation adherent to the wall of the artery and joined to a small vegetation upon the pulmonary valves. There was a small vegetation also on the mitral and aortic valves. The lungs showed puckered scars at the base and a recent infarct at the right base. There were no infarcts in the spleen or kidney.—Dr. TURNER said that three years ago a case came under his care in the Children's Hospital with a similar lesion. The child was eleven years of age, and had fallen ill two months before. She was short of breath on exertion, cyanosed, and there was pyrexia. Over the pulmonary artery there was a loud bruit, and a diagnosis was made of congenital malformation of the pulmonary valve, together with pulmonary tuberculosis. The temperature suggested either a septic condition or tuberculosis. While under observation she had attacks, during which she became livid, cold, and torpid for a time, then coming round, the pulse being very feeble. At the necropsy a condition was found very similar to that in the specimen shown, but more severe. There was a congenital stricture behind the valve and a communication between the ventricles. The attacks, he thought, were due to increase in the thrombotic mass. Dr. Peacock has likewise described a similar case.—Dr. HECTOR MACKENZIE two years ago showed a card specimen much like that shown, and there was also a communication between the ventricles. At St. Thomas's Hospital, out of thirty-eight cases of ulcerative endocarditis only two occurred on the right side. In both of these the left side was likewise affected to a less degree; both were in females, and one was associated with pelvic inflammation.—Dr. BRADFORD asked if there were any history of injury, bone disease, or other septic trouble. One or other of these conditions had often been found in association with right-sided disease.—Dr. CHAPLIN, in reply, said there was nothing to account for the disease; the only other lesion was an old lateral curve of the spine.

Dr. LEONARD GUTHRIE showed a Toad whose mouth and nostrils had been attacked by the larvæ of blowflies, causing the death of the animal. Mounted specimens of the larvæ were also shown, with drawings of their structure. The toad when found seemed in fairly healthy condition, but the tip of the nose was discoloured, the nostrils were slightly enlarged and ragged, and emitted a frothy discharge. Within them could be indistinctly seen a mass of moving larvæ. Within thirty hours of capture the nostrils formed one large cavity, separated only by a thin septum of skin anteriorly, both eyes were collapsed, and their empty tunics lay in the cavity of the mouth, whilst the whole of the soft palate had been devoured by the larvæ, leaving the bones picked bare. Between three and four dozen larvæ were removed after the death of the toad. It was well known that toads and frogs were subject to such ravages, but until the present time no attempt to identify the larvæ had been successful. Dr. T. S. Cobbold had referred to the subject in the *Veterinarian* for 1880, but had been unable to name the maggots. Prof. Brauer of Vienna had kindly examined the larvæ now exhibited, and had pronounced them to be of the genus

Calliphoræ. The species was indeterminate, but was probably Erythrocephala magna or Vomitoria. The structure of the larvæ was described, and their mode of feeding and progression. They were not true parasites (such as the Batrachomyia of McLeay), for they speedily destroyed the life of their host. Yet it was difficult to explain why the mouth and nostrils of batrachians were always the sole parts attacked. It was obviously impossible for the fly to lay its eggs directly in the toad's nostrils, and the probable explanation was that the eggs were laid in the toad's mouth whilst a pregnant fly was being swallowed. Evidence was given to show that the number of toads in certain years was largely reduced by means of the blow-fly's larva. Parallel instances in which human beings had been attacked by the larvæ of these and other flies were given. Amongst others, Messrs. Coquerel and St. Paix of Cayenne had recorded many cases of convicts whose nostrils and eyes had been almost entirely devoured by the larvæ of the golden fly (Lucilia hominivorax) with fatal results.—Dr. PENROSE had seen a gamekeeper with a swelling on the wrist. On incising it the larva of a blowfly escaped.—Dr. BEAVAN RAKE said that in tropical countries maggots in the nose were not at all uncommon, and they were seen also in the meatus of the ear, especially in lepers; but they were also occasionally found in people in higher stations of life. He related an instance in which an engineer, while on a visit to Venezuela, was stung by a fly; a swelling formed at the side of the chin, and later a large larva was expressed from it. Several cases had also been published from Central America. One so seldon saw flies about these patients that it was very difficult to trace the way in which they became affected.—Dr. GUTHRIE, in reply, said that there was a specimen in the museum of the College of Surgeons which had been taken from the leg of Dr. Livingstone. Cases in which human beings had been affected were not at all rare, the larva of nearly every known fly having been found.

Dr. ROLLESTON showed a specimen in which the Splenic Vein was occluded with firm adherent decolourised clot. The superior mesenteric vein contained a thrombus which had softened down in the centre so as to be canalised. The inferior mesenteric vein was occluded with ante-mortem clot. Adherent clot extended into but only partially occupied the lumen of the portal vein. There was softened clot in the internal and external iliac veins on the left side. The thrombosis of the superior mesenteric and iliac veins was the oldest. The spleen weighed thirty-six ounces, and had large pale firm anæmic areas in the periphery separated from the rest of the organ by a zone of congestion of the shape and general appearance of infarcts, and which microscopically showed coagulation necrosis. The splenic artery was normal. The points of pathological interest in the specimen were: (1) The association of complete thrombosis of the splenic vein with death of limited portions of the spleen, so as to produce the appearance of infarcts due to embolism of the splenic artery; (2) the fact that these infarcts were anæmic and not hæmorrhagic, as from venous stasis would naturally have been expected. From a man aged twenty-nine, who died in St. George's Hospital under Dr. Ewart. He was admitted with profuse hæmatemesis; while convalescent ascites and œdema of the left leg came on and death from asthenia. During life the blood was examined without finding any evidence of leucocythæmia.—Dr. TURNER thought that there must have been vessels other than the splenic vein, by which a certain amount of blood could get away from the spleen, and there was evidence also that some of the splenic arteries were blocked. He explained the occurrence of the lesions in the following manner: When the splenic vein became thrombosed, increased vascular pressure in the spleen resulted; this produced interference with the circulation through the whole organ, and consequent interference with nutrition. In certain weaker branches of the splenic artery which became injured by this process thrombosis took place, and thus the areas of anæmia would be produced.—Dr. NORMAN MOORE remarked that the patient had had hæmatemesis, and asked if it had been often repeated. He related the case of a woman who had been under observation for twenty years, having first been in University College Hospital, under Sir William Jenner, for a severe hæmatemesis. The spleen was at that time enlarged, though it diminished under observation. On three subsequent occasions she was admitted into St. Bartholomew's Hospital with copious hæmatemesis, and after the bleeding it was noticed that the spleen became reduced in size. Later she had such a severe hæmorrhage that she died in syncope. At the necropsy there was a partial clot in the splenic vein and a complete clot in the portal vein.—Dr. WHEATON said that a young man was recently admitted into St. Thomas's Hospital with an umbilical sinus. He had been in the tropics. The spleen was very large, and at the necropsy a large infarct in a state of suppuration was found in its lower end. There were also two smaller white infarcts in the organ. There was no disease of the arteries there or elsewhere.—Dr. ROLLESTON, in reply, said that he accepted Dr. Turner's explanation. The patient had suffered from hæmoptysis only once on admission; he had had none previously or afterwards. The cirrhosis of the liver present was very slight, and did not seem to account for the hæmatemesis.

The following card specimens were shown:—

Dr. F. C. TURNER: (1) Malformed Heart; (2) Partial Hydronephrosis of Right Kidney.

OBSTETRICAL SOCIETY OF LONDON.

The relation between Backward Displacements of the Uterus and Prolonged Hæmorrhage after Delivery and Abortion.—Dr. Apostoli's Method.

A MEETING of this Society was held on Wednesday, Jan. 6th, Dr. Watt Black, President, in the chair.

Dr. HERMAN read a paper on Backward Displacements, based on an analysis of 3641 consecutive out-patients at the London Hospital. The author showed by figures that backward displacements of the uterus are more common in multiparous women than in those who have not had children, that they are more common in those seeking advice soon after delivery or abortion than in those not applying for treatment until long after childbirth or abortion, that they are more frequent among those in whom delivery or abortion has been followed by prolonged hæmorrhage than in those in whom it has not, that prolonged hæmorrhage after delivery or abortion is more frequent in cases of backward displacement of the uterus than in cases without such displacements; therefore that there is a relation between backward displacement of the uterus and prolonged hæmorrhage after delivery and abortion. It was shown that these statements applied both to hæmorrhage after delivery and to hæmorrhage after abortion.

Dr. INGLIS PARSONS read a paper entitled "Twenty Cases of Fibroma and other Morbid Conditions of the Uterus treated by Apostoli's Method." Electrolysis, he stated, exerts two actions, a polar and interpolar. The former extracts acids and bases from the tissues near the poles, and produces a secondary caustic action; while the latter causes an exchange of atoms between molecules, some polarisation, and possibly slight osmosis. The electrical resistance of tumours varies greatly. It may be higher or lower than healthy tissue, and the results of treatment differ in consequence. Fibrous tissue and old hard tumours have a high resistance, while soft œdematous tumours are good conductors. The position and size of the tumour are important. If submucous it can be treated by the polar action, but if intra-mural by the interpolar only. A large tumour conducts better than a small one. The following points must be considered:—(1) The position of the tumour; (2) its relation to the abdominal wall; (3) its age and consistence; (4) its sectional area. Of fourteen cases of fibro-myomata hæmorrhage was stopped in all. The subsequent history, traced out for some years, showed no relapse in six cases, although in two of them the hæmorrhage threatened life. One patient always relapsed in a few months. Removal of the appendages was advised, but refused. In many cases the flow rather increased at first, but in one it was arrested by only six applications. Relief of pressure symptoms was obtained in most cases. One patient unable to walk recovered her power after a few applications; while another with bladder symptoms showed no improvement; the tumour was too hard to be affected by the current. Diminution in size only took place to a limited extent in most cases, but one tumour entirely disappeared, and pregnancy subsequently occurred, a result that could not possibly be obtained by removal of the appendages. Hysterectomy was afterwards performed on another patient, on account of the size of the tumour. Pain sometimes followed strong applications for a day or two, but soon went off,

while pressure pains were relieved. For galvano-puncture greater care was required on account of the risk of sepsis, and only an insulated trocar should be used so as to leave no sinus. The risk appeared to be very little, as no ill result ever followed in any of the cases. Unsuitable cases were—(1) Fibro-cystic tumours; (2) associated disease of the ovaries or tubes; (3) very old and hard tumours; (4) some which require no treatment of any kind. A case of hæmatocele showed no appreciable alteration after six applications. Two cases of dysmenorrhœa, due to anteflexion, remained unbenefited by the current. One case of neuralgic dysmenorrhœa was apparently cured. Menstruation was established in a girl of nineteen who suffered from primary amenorrhœa. The author concluded that Apostoli's treatment was of value in a large proportion of cases, because (1) it arrested growth, and might reduce the size, and even cause absorption, of an entire tumour; (2) it arrested hæmorrhage in most cases; (3) it relieved pain and pressure symptoms; (4) it did not prevent pregnancy.—Dr. PETER HORROCKS said there was no scientific evidence of interpolar action in the case of tumours. He said that clinically the negative pole was stronger than the positive; nasty ulcers might be produced if the negative wire touched the skin. He gathered from the context of the paper that by fibroma was meant fibro-myoma. He pointed out the difficulties of diagnosis, especially in small tumours, and he thought it was quite fair to doubt the accuracy of the author's diagnosis in Cases 1 and 8, and in the case in which he alleged that a tumour had entirely disappeared. Such disappearance, he thought, was greatly against its being a tumour in a pathological sense, and probably it was of an inflammatory nature. He pointed out that there was nothing mysterious about the action of electricity. It was a caustic, and any other caustic, especially heat, applied in the same manner and degree, would have equally good results; so that, whilst admitting that electricity was useful in some cases, he could not agree with the author's conclusions. What proof was there that electricity would arrest the growth of a fibro-myoma? He agreed that it would stop hæmorrhage and would not prevent subsequent pregnancy, but he was not equally sure that it would relieve pain and pressure symptoms in the majority of cases where these were present. But when this method was tried it was often so painful in itself that patients refused to continue it and would leave the hospital.—Dr. HERMAN agreed with most that Dr. Horrocks had said. He also could not agree to the diagnosis in the case in which a fibroid was said to have disappeared. The history seemed more like that of a hæmatocele from extra-uterine gestation, ending in natural recovery. The diversity of opinion in regard to the effects of electricity upon fibroids was in striking contrast to the unanimity about the results of removal of the appendages. He objected to the galvanising of the uterus in a girl nineteen because she had not menstruated.—Mr. DORAN offered remarks.—Dr. PLAYFAIR said some writers had undoubtedly exaggerated the claims of electricity, and probably this was the cause of the prejudice against it; but he pointed out that the opposition came chiefly from those who had given no time or trouble to mastering the undoubtedly difficult technique of its application. He had visited Apostoli, and had assiduously tried his method. Increasing knowledge and experience had not led him very materially to modify the conclusions he had already formulated elsewhere. He still believed electricity a substantial gain to gynæcology, though the process was complex, difficult and tedious, and not adapted for general use. That it possessed the power of promoting the absorption of fibro-myomata to a certain though limited extent he believed to be beyond question. He did not consider it to be an absolutely safe procedure. Electro-puncture was very different from electro-cauterisation. The number of cases in which mere diminution of size was of importance was very limited; hence he had practically abandoned this application of electricity, though he still thought it applicable in certain cases of fibroids impacted in the pelvis. He could not agree with Dr. Horrocks' attempt to minimise the value of Dr. Parsons' cases by questioning their diagnosis. He found the hæmostatic effect of the positive pole admirable in many cases, but not in all, and he thought this was due to the actual contact of the pole with the endometrium. Curetting and the application of caustics were quite inapplicable to most cases of hæmorrhagic fibroid where there existed a largely elongated endometrium. He quoted a case where caustics and the curette had been thoroughly applied, but always with temporary benefit. He tried electricity, and the lady, although only between thirty and forty years of age, had never menstruated since. He believed that theoretically electricity should be tried first in all bad cases of hæmorrhagic fibroid; but it was too costly and tedious in some cases, and then removal of uterine appendages should be performed. He was surprised Dr. Parsons had not mentioned the use of electricity in chronic uterine catarrh and other morbid conditions, such as membranous dysmenorrhœa.—Dr. ROUTH thought the entire disappearance of fibroids by electricity had been exaggerated. Soft ones disappeared more readily than hard ones. Electricity certainly did good and enabled persons to get about as if the fibroids did not exist. Applied to the cavity of the uterus the negative pole produced dilatation of the cavity and very often induced menstruation; the positive pole arrested hæmorrhage. He thought it scarcely kind to doubt the diagnosis of the cases brought forward by Dr. Parsons.—Mr. SKENE KEITH thought it hardly fair to cast doubts on the electrical treatment by suggesting that mistakes in diagnosis were sometimes made. He agreed very much with Dr. Parsons' conclusions, but thought in some cases surgical interference might be the better treatment.—Dr. INGLIS PARSONS, in his reply, said that he had in 1888 opposed the theory of interpolar electrolysis. In his experience the anode was more destructive than the cathode. The diagnosis in the majority of these cases was, from the size of the tumour, beyond a doubt. They had been seen by his colleagues. In one case he had stated in the paper that the diagnosis was an open question. He thought the tumour which disappeared was undoubtedly a soft fibro-myoma. She did not have amenorrhœa, but menorrhagia persisted for two years. He agreed with Dr. Herman regarding the treatment of primary amenorrhœa, but in this case the mother was very anxious for menstruation to begin. In fibro-myoma the menopause was often delayed five years or even more. He thought that acupuncture was much less dangerous when done with his own insulated trocar, because it did not leave a sinus as Apostoli's did. He had only lately used electricity for endometritis, but he had found that it would cure cases when all other means had failed.

The following specimens were shown:—

Dr. SHAW MACKENZIE: Sarcoma of both Ovaries.

Dr. HEYWOOD SMITH: An Abscess connected with the Left Ovary removed by Abdominal Section (Actinomycosis?).

Mr. BLAND SUTTON: (1) Dermoid Cyst showing Baldness of the Wall; (2) Dermoid Cyst associated with Fat in the Broad Ligament; (3) Hydrosalpinx.

Dr. BOXALL: Rupture of the Uterus.

SOCIETY OF MEDICAL OFFICERS OF HEALTH

Mr. SHIRLEY F. MURPHY, President, in the chair.

Building By-laws.

AT a meeting held on Dec. 21st last a discussion was opened by Dr. LONGSTAFF, chairman of the Building Acts Committee of the London County Council, on Building By-laws in relation to the Air and Light around Buildings. The present law, he said, fixed the width of all new streets at not less than 49 ft., but in one 50 ft. wide the buildings on each side might be 90 ft. high. This height the committee would reduce to 75 ft., or not more than one and a half times the width of the street, though they were not prepared to raise the minimum street width, as had been done in the model by-laws of the Local Government Board, which fixed it at 66 ft. The space in the rear of every house they would increase from 100 to 150 square feet; but as hitherto this might be covered over by a building of one storey, the model by-laws required a space 25 ft. deep, free from all buildings and extending through the entire width of the premises; this was better, but no regard had ever been paid to the different height of buildings. The committee had, however, drafted an amendment which they hoped to have introduced into the Bill, presenting the advantage of adapting itself to the varying height of houses. It was that an open space 10 ft. deep, and free from any buildings be reserved along the entire width of the rear of the site, and that no part of the buildings, chimneys alone excepted, rise above a line drawn at an angle of 45° from the ground at the further boundary

of the space in the rear to the eaves or most prominent point of the main body of the building. This was the angle established by custom in the question of "ancient lights," which, however, applied only to old houses, but was found to work satisfactorily. In dealing with existing buildings which were not in accordance with the new regulations they were willing to respect rights of which the owner might be in actual enjoyment, permitting their re-erection to the same height as before; but they would not recognise the potential right to put up a building of 90 ft. high on the site of one of 20 ft. They did not, however, propose to deal with "wells" or courts enclosed within large blocks of houses. —Dr. ARMSTRONG said that in Newcastle all new streets must be at least 40 ft. wide, and have in their rear a "back street" or thoroughfare 20 ft. wide on which no houses might face.—Dr. L. PARKES deprecated the practice of building huge blocks of artisans' dwellings, or of mansions separated only by narrow, ill-ventilated spaces or courts, maintaining that the intervals should be equal in width to the full height of the houses. He thought that a clause might be introduced into the Bill requiring plans and elevations of all proposed new buildings to be submitted to the local authorities, and that if they considered them likely to be dangerous to health the County Council should refuse their sanction. At present nothing could be done until they were occupied.—Mr. WYNTER BLYTH held that, while the County Council might well make by-laws, the actual supervision could be efficiently carried out only by the local authorities. If all plans were submitted to the local medical officer of health, to be reported on by him to the local authority, the annoyance and expense consequent on the refusal of certificates under the Customs and Inland Revenue Act would be saved. —The PRESIDENT considered that the width of streets should be one and a half times the height of the houses, and that the application of the angle of 45° in the case of all rooms used for habitation would meet the difficulty of enclosed courts. The amount of light, apart from air, depended on the orientation or aspect of the house, and he gave Vogt's formula for determining the possible illumination under all circumstances:—

$$\frac{L}{H} = \theta \times (30° + \delta) \cos a.$$

When H = height of house. L = width of street &c. θ = angle of solar light. δ = angle of direction of street with the meridian.

It was then unanimously resolved that the Society represent to the President of the Local Government Board the urgent need for the amendment of the London Building Act so as to secure an adequate supply of air and light around and within all buildings, and that the amendment proposed by the County Council be accepted and introduced into the Bill.

HARVEIAN SOCIETY OF LONDON.

THE President (Mr. H. Cripps Lawrence) delivered the annual presidential address, in the course of which he gave an account of the main objects of the Harveian Society, and spoke of the means by which these might be best accomplished. Dealing with the salient points of Harvey's scientific work, which suggested to the individual members of the Harveian Society how best to carry out the work of the Society, he said:—

"One of the most important of these in reference to scientific investigations is to be found in a letter from Harvey to John Riolan the younger, 'in opposition to those who repudiate the circulation because they cannot see the efficient or final cause of it, and who exclaim, *Cui bono?*' wherein he propounds these axioms: 'Our first duty is to inquire whether the thing be or not, before asking wherefore it is.' Again, 'He who truly desires to be informed of the question in hand, and whether the facts alleged be sensible, visible, or not, must be held bound either to look for himself or to take on trust the conclusions to which they have come who have looked;' and assuming the witnesses to be credible, he adds, 'there is no higher method of attaining to assurance and certainty.'[1] Next to scientific *caution*, Harvey exhibited *toleration*. Aikin refers to this when he tells us that Harvey was 'cheerful, candid, and upright; he was not the prey of any mean or ungentle passion. He was as little disposed by nature to detract from the merits of others, or make an ostentatious display of his own.' Again, 'the many antagonists whom his renown and the novelty of his opinions excited were, in general, treated by him with modest, temperate language, very different from their own; and while he refuted their arguments he decorated them with all due praises.'[2] So, too, Dr. Ent,[3] in his preface to 'Harvey's Researches on Generation,' adds, 'and we have evidence of his singular candour in this, that he never hostilely attacks any previous writer, but ever courteously sets down and comments upon the opinions of each,' regarding it as 'argument of an indifferent cause, when it is contended for with violence and distemper, and that truth scarce wants an advocate.' Harvey's character, too, was *modest* and *generous*. Of the truth of this we have evidence in his solicitude for the welfare of the College of Physicians. Having built for the college 'a library and a repository for simples and rarities,' on Feb. 2nd, 1653, 'Harvey was present on the opening occasion, having provided a handsome entertainment and formally handed over the title-deeds and entire interest of the building in a speech of the utmost benevolence and good-will.'[4] On Sept. 30th, 1654, being elected President of the College in his absence, 'he declined on the next day, owing to his age and infirmities, recommending the continuance in office of Dr. Prujean, under whose prudent management and fostering care the affairs of the College had greatly prospered.'[5]

Once more, Harvey was not only the greatest scientist of his day, for he had 'the rare distinction of standing at the head of three departments of science in England—comparative anatomy, physiology, and medicine,'[6]—but he was a man of widely cultivated mind outside his professional work, fond of reading the classics; and still a learning mathematician in his old age. Harvey knew the men of letters and science of his day, as Dr. Dickinson, in his recent Harveian oration pointed out.[7] 'It is worth noting that Harvey's long life made him the contemporary of the four greatest men whom England has produced—Shakespeare, Bacon, Milton, and Newton,' and of others such as Hobbes, Dryden, Boyle, and Cowley. With all this culture he was an independent searcher after truth, and albeit vivisection became necessary thereto, he was reverent in the use of that means. Harvey, though by no means eager in the pursuit of wealth, set a good example to his professional brethren in making a will while in the possession of his faculties, and reading it over even within six months of his death, at eighty years of age. Active in religious sentiment, 'he evinces,' as Dr. Willis tells us, 'true and elevated piety throughout the whole course of his work on Generation, and seizes every opportunity of giving utterance to his sense of the immediate agency and omnipotence of the Deity.' So lived, so died, one of the great men whom God, in virtue of His eternal laws, bids to appear on earth from time to time, to enlighten and ennoble mankind.'

[1] Bettany: Eminent Doctors, vol. i., pp. 33-34.

[2] Ibid., p. 47. [3] Ibid., p. 41.

[4] Ibid., vol. i., p. 45, et seq.

[5] Dr. Willis' Introduction to Harvey's Life (New Sydenham Society), p. 35.

[6] Willis, ut supra.

[7] Harveian Oration, Dr. Dickinson: British Medical Journal, Oct. 24th, 1891

ROYAL ACADEMY OF MEDICINE IN IRELAND.

A MEETING of the Obstetrical Section was held on Nov. 27th, Dr. Atthill in the chair.

Cæsarean Section.—The PRESIDENT (Dr. Horne), having returned his warmest and best thanks to the Fellows of the Royal Academy of Medicine for having elected him as president of the Section of Obstetrics, read an address on this subject. His firm conviction was that there are many infants annually sacrificed who might be saved if the medical profession would recognise the fact that a majority of such cases could be saved by prompt surgical interference. He gave a short *résumé* of the history of the operation, and did not consider it required more than ordinary surgical skill for its performance. He laid special stress on the treatment of the uterine wound, as advocated by Sänger of Leipzig, and paid a

tribute of respect to Lister, as having restored the Cæsarean section from the limbo to which it was consigned to its proper place in the surgical art by means of antiseptics. On the early recognition of pelvic deformity depended the success of Cæsarean section.

Removal of a Pin from the Bladder. — Dr. LANE exhibited a pin about two inches in length which he had removed from the bladder of a young lady. The patient was seen on the day the pin escaped into the bladder, and was with ease felt by examination per vaginam. The head was resting against the posterior wall of the bladder and to the right of the uterus, the point being directed forwards and to the left side of the orifice of the urethra. Owing to certain reasons the attempt to remove the pin had to be postponed for three days, and when the patient was under ether the pin was found to be lying transverse and some distance above the inner orifice of the urethra. Previous to any examination the vagina was washed out, and prior to attempting to remove the pin the bladder was injected with water. The pin was caught and withdrawn. There was a very slight amount of blood in the urine that day, none afterwards, but the urine was turbid. On the fifth day the patient had a severe rigor and also pyelitis of both kidneys. Cause not quite certain, as temperature and pulse had been perfect, unless it was due to cold, as the patient had the day previously been sitting up in bed at an open window, without much covering. Symptoms gradually subsided, and the patient made a perfect recovery.—Dr. MORE MADDEN was certain that the Academy would appreciate the intent of Dr. Lane's communication, both as regards the comparative rarity of the accident described and the efficacy of the treatment adopted in the case just referred to. The bladder has in many instances been found to be the receptacle for a most extraordinary and heterogeneous assortment of misplaced articles, an occurrence of which several instances were long since related by the late Sir Benjamin Brodie,[1] as well as by Sir Philip Crampton, and more recently by Dr. Barton of Dublin.

Two Cases of Cæsarean Section.—Dr. SMYLY exhibited two patients upon whom he had performed Cæsarean section in the Rotunda Hospital. Both cases presented an extreme degree of pelvic deformity, and the birth of a living child by any other method than abdominal section would have been impossible. One case was a well-marked example of a rare deformity the result of a kyphosis in the lower lumbar and upper sacral regions of the spine, in which the narrowing was most marked in the transverse diameters, and especially at the pelvic outlet, and the other was an example of the generally contracted flat rachitic pelvis, in which the narrowing was most marked in the conjugate diameters, and especially at the pelvic brim.—Dr. MORE MADDEN pointed out that five-and-twenty years ago craniotomy was invariably resorted to in those cases of difficult or obstructed labour in which a living child might now be delivered from a living mother with safety to both. Dr. Murdoch Cameron of Glasgow, as well as Dr. Smyly and others, had abundantly demonstrated the possibility, and with due precautions the safety in proper cases, of the Cæsarean section. It was a great satisfaction to him to find that most of the leading obstetricians of the present day now probably agreed that child-destroying operations should be eliminated from midwifery practice, and that the only question in extreme cases of difficult labour should be which one of the two suggested child-saving operations—viz., Cæsarean section or Porro's operation—should be resorted to.

Dystocia due to a Cyst in the Liver of a Fœtus.—Dr. BAGOT read a paper under the above title. He considered the case of extreme interest from a pathological as well as from an obstetrical point of view. Records of cases where congenital cysts of any size had been found in the liver were very rare, as were also records of such, or indeed any, tumour of the fœtal liver causing dystocia. Dr. Bagot had been able to find only four cases, besides that recorded by Witzel, where dystocia had been caused by any form of liver tumour—viz.: (1) Haase (N. Z. xi., 262); (2) Müller (Hohl., p. 286); (3) Naggereth (Deutsche Klinik, 1854, No. 44; Wochenschr., iv., 458); (4) Schlesinger (Hohl., p. 289). The first three, according to Winchel, "resolve themselves into either hepatic physconia or a lymphatic tumour of the liver." The tumour in Naggereth's case was a carcinoma.

[1] See Brodie's Works, vol. iii., p. 508.

WEST KENT MEDICO-CHIRURGICAL SOCIETY.

AT the meeting on Friday, Jan. 8th, 1892 (Mr. Roberts, President, in the chair), Dr. DUNDAS GRANT gave a demonstration on several New Instruments used in the Treatment of Ear, Throat, and Nose Diseases. Amongst others he exhibited and described his Eustachian self-inflater, a safe endo-laryngeal forceps, and an apparatus for exploration of the antrum of Highmore.—The President, Drs. Macilavin, Tayler, Wainewright, and Clarke joined in the discussion which followed.

Reviews and Notices of Books.

Colour-blindness and Colour Perception. By F. W. EDRIDGE-GREEN. With Three Coloured Plates. Pp. 311. (Vol. LXXL of the International Scientific Series.) London: Kegan Paul. 1891.

IN this work Dr. Edridge-Green presents to the reader the existing state of our knowledge of that defect of vision which consists in imperfect perception of colour, based on personal examination of 116 cases of colour-blindness and of all accessible recorded cases. After a short introductory section on the physical basis of colour, he gives an explanation of the terms he employs in the subsequent chapters. The most important of these is the term "psycho-physical unit," by which he means the recognition of distinct differences between different objects, and therefore in this case the perception of the several colours that an observer is capable of recognising in the solar spectrum. This number is found to vary; most observers can distinguish six units of colour—red, orange, yellow, green, blue, and violet; whilst some, like Newton, see seven, indigo being introduced between blue and violet. Latterly it appears some writers on colour have demurred to the insertion of indigo, and especially to its insertion between blue and violet. If a "six-unit" were asked to make seven colours, he would add greenish-yellow to the list. It has also been pointed out that indigo is a green-blue and not a violet-blue, and therefore could not be placed between the blue and the violet. He considers that impressions of sight may be divided into four sets—those of colour, form, size, and shade. We should be inclined to add a fifth, movement. In accordance with the theory of psycho-physical perception Dr. Edridge-Green states that the normal sighted will perceive any mixture of colours as a unit, a modified unit, or as white. It is not, therefore, surprising that the mixture of two colours representing the whole of the spectrum should make white. "The complementary of any colour can be obtained by the subtraction of the colour itself from white light. It therefore follows that the complementary of any colour consists of a mixture of the remaining rays of the spectrum." He gives the following list of true spectral complementaries: red, blue-green; orange, green-blue; yellow, blue; yellow-green, violet; green, rose.

In regard to the prevalence of colour-blindness, the results of Dr. Edridge-Green's observations give a rather higher percentage than those of other inquirers, with the exception of Dr. Wilson, for he finds the percentage of the two-unit to be about 2, of the three-unit about 1·5, and the percentage of the four-unit about 3. But as the four- and five-unit are, for all practical purposes, normal sighted, he does not include them, though they have really diminished colour perception. By the ordinarily used lists about one woman in 2000 is colour-blind. It is a rather more common defect in the uneducated than in the educated, and it is interesting to note that the author has found more colour-blind persons amongst musicians than in any other class or profession. He

holds the chief causes of colour-blindness to be diminution in the number of psycho-physical colour units and shortening o one or both ends of the spectrum; and whilst he proposes to name the normal sighted hexachromic, he terms those who are colour-blind from the former cause pentachromic, tetrachromic, trichromic, and so on, according to the number of the colour units they are capable of perceiving. A considerable section of the book is occupied with the classification of the colour-blind and with an account of the various methods that have been used and of those that should be used in testing colour-blindness.

Speaking of after-images, the account given of the after images seen after a momentary gaze at the sun corresponds with our experience in the succession of colours which become visible. First a positive yellow image of the sun is seen surrounded by pure green; the whole then changes into pure green, which becomes blue-green, then blue, then violet, and then very dark (black). A red element then comes in, and the after-image becomes purple, and then gradually fades away. He does not mention, however, the fact that when the image has nearly died away movement of the eye or pressure upon the globe causes its resuscitation to a condition of considerable brilliancy. Dr. Edridge-Green, believing, as above stated, that there is evidence to show that whilst most people see only six units of colour in the spectrum there is a class who see seven, constructed an ingenious test for the faculty in the following way. He painted a ground of prussian blue, and when the colour was dry put an after-tint of another colour over it, keeping a careful record of what he had done. In most instances he placed the second tint over only one half of the disc. On looking at these coloured discs he found that he was unable to tell, without referring to his note-book, the colour of the after-tint. He now took the discs to a well-known artist, but he failed to tell the colour of the after-tints. A pupil of his, however, a boy of fourteen, looked at the discs and told the colour of the after-tint correctly in each case. It is not surprising, then, that some artists render the tints of nature better than others; and it is somewhat amusing to read that in this case the boy apologised for seeing colours like this (his master being incredulous) by saying that he had something the matter with his eyes when he was a child. He raises some very strong objections both to the Young-Helmholtz theory of colour perception and to the theory of Hering.

Many points are noticed that we do not remember to have elsewhere seen. For instance, the author observes there is a variety of colour defect which is quite distinct from diminution in the number of the psycho-physical units—namely, a shortening of the spectrum,—and this may occur either for bright light or in the case of light of diminished intensity. A very common mistake, due to shortening of the red end of the spectrum, is the confusion of pink and blue. This Dr. Edridge-Green ingeniously explains in the following way. If a person with considerable shortening of the red end of the spectrum is shown a pink which is composed of red and violet the red rays are not perceived, and hence the pink appears as violet without a trace of red, and the pink is consequently matched with a violet or blue very much darker than itself. He has collected from various sources many instances of accidents at sea and on railways resulting from colour-blindness in captains and the drivers of engines; and there can be no doubt that the present mode of examination is unsatisfactory, and that before being promoted to such important and responsible posts the candidates should pass a skilled examiner well supplied with appropriate means of testing the existence of a normal power of discriminating colour.

OUR LIBRARY TABLE.

Practical Pathology and Morbid Histology.—By HENEAGE GIBBES, M.D., Professor of Pathology in the University of Michigan. Edinburgh and London: Young J. Pentland. 1891.—This is, in part, an expansion of the little work published by the author some years ago, and his acknowledged skill as a practical microscopist will doubtless give weight to his instructions. Indeed, in fulness of directions as to the modes of investigating morbid tissues the book leaves little to be desired. The ensuing chapters, which deal with morbid changes, seem, however, to lack something in respect both of detail and pathogeny. For instance, to ascribe the hyaline fibroid change often met with in the ovary to "chronic irritation of a neurotic character" is not only novel, but would require much cogent evidence before it could be accepted. The descriptions of tumours are for the most part brief and do not contain any new facts. The account of endocarditis is inadequate, and there does not seem to be sufficient justification for separating syphilitic endarteritis from endarteritis obliterans. Dr. Gibbes holds special views upon the lesions of acute tuberculosis, and maintains a distinction between "reticular miliary tuberculosis" and "disseminated catarrhal pneumonia," the latter consisting only of disintegrated products of inflammation, but containing numerous bacilli, the former yielding very few, if any, bacilli. The naked-eye characters of the two varieties are, he states, identical. He further seems to maintain a distinction between true tuberculosis of the lungs and pulmonary phthisis, and herein he occupies almost a solitary position among modern pathologists. The morbid lesions of the nervous system are but cursorily treated; but when we come once more to the technical part of his writing, as in the description of "photography with the microscope," we find the author at his best. He is most enthusiastic upon this latter subject, and the work itself is throughout profusely illustrated with reproductions of micro-photographs, some of which are admirable, others less clear. On the whole we may say that the practical histologist will gain much useful information from the book.

Die Protozoen als Krankheitserreger. Von Dr. L. PFEIFFER, Geh. Med.-Rath. und Vorstand des Grossh. Sachs. Impfinstituts in Weimar. Zweite sehr erweiterte Auflage. Jena: Gustav Fischer. 1891.—In November last, when we reviewed the first edition of this excellent work, we drew attention to the rapid strides that had been made in our knowledge of the protozoa related to diseased processes in man and animals. The appearance of a second edition of Pfeiffer's work so shortly after the first bears out most fully what we then stated, as the present edition is almost twice as large as its predecessor. The whole work is interesting, and an enormous number of new facts have been collected; but the second part relating to the occurrence of parasitic diseases of protozoan origin will have a special interest for our readers. Chapters on Malaria, on Vesicular Eruptions, and on Contagious Epithelioma and Darier's and Paget's Disease are especially interesting, and the short note on the Amœba Coli, which has been made familiar to English readers by Cunningham, Osler, and Simon, is also interesting. Even those who have read the first edition of this work will find it well worth their while to go through the second edition, as several mistakes have been corrected, and, as we have already stated, much new and important matter has been added.

Intubation of the Larynx. By JAMES B. BALL, M.D Lond., M.R.C.P., Physician to the Department for Diseases of the Throat and Nose, and Senior Assistant Physician, West London Hospital. With Illustrations. London: H. K. Lewis. 1891.—This is in the main the

reprint of an article contributed in 1889 to a medical periodical. But it has been brought up to date by the addition of later statistical results and certain other details. It is a short account of the history of intubation, of the method of inserting and withdrawing the tubes, and of the results hitherto obtained by their use. Those unacquainted with this treatment will find in Dr. Ball's book a lucid description of it, unmarred by the exaggerations to which enthusiasm for their subject, especially when a "new" one, often leads authors.

Bibliographie der Klinischen Helminthologie: Heft I., Echinococcus Cysticus. Von Medicinalrath Dr. J. Ch. HUBER. Munchen: J. F. Lehmann. 1891.—This, apparently the first instalment of what should be an exceedingly useful series of bibliographical references, gives at a glance an index to the most important literature that has been published on hydatid cysts. First, there is a general list; then comes a classified list of the papers dealing with the echinococcus as it occurs in the different organs and systems of the body; then the distribution or geography is taken up to date; and, lastly, a list of 136 German dissertations, dating from 1808 to 1891, with a similar list of Paris theses—eighty-five in number—completes the work, which occupies about forty pages. It would be well if those working at other directions would take the same trouble to collect and arrange the literature of their subjects for future reference by other workers. This bibliography would have been still more valuable had a short abstract (two or three lines) of each paper been given along with some indication of the relative importance of the work.

Clinical Lectures on Surgical Subjects delivered in University College Hospital. By CHRISTOPHER HEATH, Holme Professor of Clinical Surgery in University College, London. J. & A. Churchill. 1891.—These lectures have all been previously published in medical periodicals, and eight out of the total of seventeen have appeared in our columns. Our readers are well acquainted, therefore, with Mr. Heath's style as a lecturer. He is eminently simple and practical, and it is these features which have led to his success as a teacher, and they will commend these lectures to a large class of readers. Old University College men, in particular, will be very glad to have such a book as this to recall the lessons often impressed upon them by Mr. Heath.

Archives de Physiologie. Série 5, tome iv. No. 1. Janvier, 1892. E. Masson.—This number opens the new year well, containing a large number of articles, some of which are of considerable interest. Among these we may mention the following:—1. Inversion of the Blastodermic Laminæ, by M. H. Cristiani, which gives the results of investigations made upon more than 600 embryos of rats, showing that the effects of the inversion which occurs in the layers of the blastoderm in some rodents is not of any great importance in the development of these animals. 2. A curious paper on the Toxicity of the Urine of the Insane when injected into the veins of dogs and rabbits. 3. Mr. Roger gives the details of experiments, showing that the Liver is an important agent in preventing the Toxic Action of certain Drugs, as strychnine, as may be easily shown by the difference in the effect of that poison in animals possessing a liver as compared with those from which the liver has been removed. 4. M. Hénocque gives the results of his observations on the treatment of Phthisis by Injections of the fluid expressed from the Testes. 5. MM. Morat and Doyon give the results of their experiments to determine the Vaso-motor Nerves of the Eyes, which show that these nerves run exclusively in the cervico-thoracic sympathetic and in the fifth nerve. The great sympathetic plays in regard to the vessels of the fundus or posterior segment of the eye, the double part of constrictor and dilator. The fifth is the dilator of the vessels of both the anterior and posterior segments. 6. M. Gley supplies contributions on the Effects of Extirpation of the Thyroid in the Dog and in the Rabbit. 7. MM. Wertheimer and Magnin give a paper on the Action of Ergotine and Ergotinin. 8. M. François-Franck shows a new Method of exposing and examining the Heart of Mammals. 9. Dr. Brown-Séquard shows that life can continue in certain regions of the spinal cord and in certain muscles andn erves for a considerable period after general death. 10. A Note on a Change hitherto unobserved in the Lens during Accommodation, by M. Tscherning.

Ophthalmic Charts. Devised by FRANK HAYDON, L.R.C.P. Published by Down Brothers, St. Thomas's-street, London, S.E.—These are charts of a convenient size (about three inches square), presenting a red ground with a white circle in the centre for the optic disc. By means of this anyone who is able to recognise the details of the fundus of the eye and has moderate skill in sketching can easily insert the vessels of the retina and depict any marked lesions of the retina or choroid. A legend below facilitates the recognition of the case by giving space for name, age, date, disease, vision R. and L., tension, and reading power. Another chart gives outline figures of the eye in full, in profile, and in section, which will save much trouble and at the same time prove very serviceable to the busy practitioner. We commend the charts to our readers.

Habit and Health: a Book of Golden Hints for Middle Age. Edited by GUY BEDDOES. London: Swan Sonnenschein and Co., Paternoster-square. 1890.—Though we cannot fix by any term of years the limit between youth and middle age, there comes a time in every life when, without apparent weakness, the abundant energies of the earlier period become set in a state of more moderate activity. There is good working power, and usually much to do, but a lessening of constitutional activity. The object of a series of hints on self-management at this critical period must commend itself to all thoughtful readers. Notwithstanding that a certain dryness attaches to this work in common with most others which are mere compilations of recorded opinion, it contains a good deal that is readable and instructive. More discrimination might, indeed, have been used in excluding views which have long since become antiquated; but one may still gather from this volume wise counsel as to personal guidance amid the work and worry of a busy life. Among other noteworthy quotations we may mention those from Abernethy and Sir Henry Thompson on diet, with some on exercise by Wilson Philip, as deserving of attention.

The *Veterinarian* for December contains reports of some of the papers which were read, and the discussions thereon, at the Seventh International Congress of Hygiene and Demography, a paper by Professor Walley, one by Mr. Gerald E. Griffin, D.V.S., on Porrigo (Texas Mange) in Horses, and an article on Tetanus by Dr. Claude D. Morris of New York. It also contains reports of the meetings of the Royal Agricultural Society of England, of the Central Veterinary Society, and the Scottish Metropolitan Veterinary Medical Society, before which Professor De Jong read a paper on Animal Parasites of the Skin.

SMALL-POX AT BATLEY.—Despite the precautions which the Sanitary Committee and officials are taking with respect to the small-pox outbreak in Batley, fresh cases occur daily, and the accommodation at the Isolation Hospital is now fully utilised. One death has occurred there since its opening, and another is reported to have taken place in High-street, making a total of fourteen. The majority of the cases are stated to be in the unvaccinated, and mainly those of children.

New Inventions.

AN IMMEDIATE PERINEORRHAPHY CASE.

THE accompanying illustration shows a case, made by Messrs. Arnold and Sons according to my design, containing all that is necessary for the suture, immediately after labour, of perineal ruptures. The contents are: 1. A supply of large full-curved needles of various sizes. In the circumstances under which the operation often has to be performed, unmounted needles appear to me to be more easily used than mounted needles, which need threading after passing.

2. Wells's needle-holder. This has no catch, and is the simplest and best for most purposes. 3. Curved scissors to trim off any loose shreds of tissue. 4. Dissecting forceps. 5. Supply of wire or gut suture. The above can of course be modified to suit individual preference, but probably the plan of combining in compact and portable form the requisites for the operation, and thus securing that they are always complete, clean, and ready for use, will be a convenience to many practitioners, and will encourage the more frequent performance of immediate perineorrhaphy.

Leeds. JOHN BENJ. HELLIER, M.D. Lond.

A NEW UTERINE DILATOR.

THE accompanying engraving represents a new dilator designed by me, on the principle of my phimosis dilator figured in THE LANCET. The advantages of the dilator are its simplicity of action and its applicability for different uses. Not only does it allow the cervical canal to be evenly dilated throughout its whole extent, but by an arrangement at the end of the handles of a rack and screw, working on a scale marked in eighths of an inch, the

operator may correctly estimate the amount of dilatation he is producing, and may also keep the blades fixed by the same rack and screw while he makes his application to the interior of the uterus. In many cases of abortion it is necessary to dilate the only partially opened os uteri, in order to abstract the ovum or placenta. In such cases the dilator is of particular use, as it can be employed to first dilate the os uteri and the cervical canal, and then as an ovum forceps, to remove the uterine contents. The instrument has been made by Messrs. Arnold and Sons.

Boscombe. FREDERICK GARDNER.

BRITISH MEDICAL BENEVOLENT FUND.

THE annual general meeting of subscribers to this Fund was held at the residence of the treasurer on Thursday, Jan. 14th, Sir James Paget, Bart., F.R.S., President, in the chair. Amongst the subscribers present were Drs. Baines, Steele, Ince, and Felce, and Messrs. Mould (chairman of committee), Field, Churchill, Page, with Dr. Sidney Phillips and Mr. Edward East (hon. secs.). In the absence of the treasurer the financial statement and the report of the committee were submitted to the meeting by the hon. secretaries. From these it appears that in administering the British Medical Benevolent Fund during the past year the committee have constantly kept in view the objects for which the Fund was founded—of affording immediate pecuniary relief to distressed qualified members of the medical profession, their widows or orphans, and of granting annuities to such after they have attained sixty years of age. The Fund has received during the year the sum of £4968 in legacies, together with income resulting from previous investments, and £3892 14*s.* 6*d.* subscriptions and donations. With regard to the legacies, the sum of £4968 includes the last instalment—£1450—of the Chapman bequest, making in all £14,750 from that estate; also £3500 from the estate of the late Dr. Marris Wilson, and £17 19*s.* 2*d.* from that of Miss M. A. Pretty. The income from dividends shows again a considerable increase owing to the large additions to capital made during the last three years. Subscriptions for 1891 have shown a marked increase, being £1312 2*s.* 1*d*, as compared with £1208 18*s.* 6*d.* in 1890, an increase of over £100. The donations, which stood at £576 in 1890, slightly exceeded that amount in 1891, being £580, independently of a generous donation of £2000 from "J. S.," bringing the total up to £2580. The total receipts, therefore, in subscriptions and donations was £3892 14*s.* 6*d.*, as compared with £1785 in 1890. The beneficiaires of the Fund have been relieved, as usual, either by grants or annuities. Grant department: The number relieved was 159, the same as in 1890, the grants varying in amount from £5 to £20, and, as in former years, these were in most cases distributed in instalments by honorary local secretaries and other members of the committee, or through the agency of the Cheque Bank, the amount distributed being £1768. Annuity Department: In this department £2000 of the donations, as well as £4871 received from legacies, were invested, and the special fund for raising £20 annuities to medical men to £26 was increased by the investment of £50 in Midland Debenture Stock. The sum of £1763 6*s.* 8*d.* was distributed in annuities to 99 recipients, these annuities being as usual paid monthly. There were altogether 25 new annuitants elected during 1891, 4 at £10 and 21 at £20 each, and two medical men were placed upon the special fund. Annuitants at the end of the year numbered 93. One honorary local secretary was elected during the year in place of Dr. Fernie—viz., Dr. Averill, for Macclesfield; and the services of gentlemen willing to act in that useful capacity would be welcomed by the committee. Of vice-presidents the committee have had to deplore the loss by death of Sir Prescott Hewett, Bart., F.R.C.S., and of Mr. John Morgan, F.R.C.S.; and Dr. Bissett Hawkins, F.R.S., and Mr. David Taylor were elected to fill the vacancies. Mr. J. H. Morgan, F.R.C.S., was added to the committee, the members of which, together with the officers, were re-elected. Votes of thanks to the chairman of committee, auditors, treasurer, and hon. secretaries, the medical press, and to Sir James Paget, the chairman, were accorded and suitably acknowledged. The committee would observe that the entire work of this charity is voluntary, only printing and stationery costing anything; so that, excepting collectors' commission, every penny subscribed is available for the purposes of the Fund; and they would earnestly solicit the attention of the profession to the work and invite subscriptions, which may be sent to any member of the committee, and especially to the honorary financial secretary, Sidney Phillips, M.D., F.R.C.P., 62, Upper Berkeley-street, W.

THE LANCET.

LONDON: SATURDAY, JANUARY 23, 1892.

THE great political event of the day in the politics of the world is the famine in Russia. There can scarcely be a doubt that the event threatens to be appalling. Out of it, if it progresses, we are condemned almost of necessity to experience one of two additional calamities—war or pestilence; nay, perhaps a combination of these lamentable evils. The immediate cause of the famine it is not easy to divine; the full extent of it is difficult to define; so many unsatisfactory and inextricable causes or descriptions have been stated, on what is called authority, but authority of little value. It is, however, a fact that, despite the domestic economy of the peasantry of Russia, and in most instances of the noble families, there has been a steady dearth of food. Before the war between Russia and our own country in combination with France, the surface of the Russian Empire embraced 1,675,492,948 acres of land, rather more than one-fifth of which was under cultivation. About 24,000,000 acres were private domains; 218,387,516 were devoted exclusively to arable purposes; 107,971,138 were pasture land; 393,277,413 acres were covered with forest wood, and 932,052,138 were waste. Deducting the waste and forest lands from the whole, there were left 350,163,397 acres of cultivated soil, which, on a uniform distribution to population, would have given a proportion of more than six acres and a half to each one of the 53,000,000 of the then existing inhabitants. From these resources it was calculated that the produce of the empire was sufficient to supply all the people with the elements of food that were just sufficient for life. There the produce ended; for beyond the production of food very little indeed was done with the soil. A few years before the war it seemed as if Russia were contemplating the opening up of her mineral resources, and a man of science from Russia, the Count ST. ALDEGONDE, who knew the then reigning Czar, came over to this country to see how we developed our mineral wealth, and sought interviews with some of our leading engineers in order to ascertain what help they could give towards realising the splendid conception. SOPWITH, one of our men of science whom the Count consulted—and a better authority he could not have selected,—was much taken with the design; he considered that in such vast tracts of country the most precious mineral wealth must lie concealed, especially in the southern districts, and he thought that the whole question of advancement of the Russian peasants lay in making them miners on their own soil rather than residents in Siberia.

Every historical student knows that this beneficent project was never carried out, but that instead the great empire was setting its teeth for war. Not to develop peace and plenty at home, but to try to seize plenty abroad by the instrumentality of an overwhelming armed force was the policy pursued—a policy as decisive as it was fatal. Within fifteen years the difficulty with the unspeakable Turk came again forward, followed by the Crimean campaign, the humiliation of Russia, the triumph of England and France, and a patched-up peace. From that moment the Russian peasant lost, in some degree, even the former quota of the miserable black bread on which he had previously held body and soul together. All heart for engineering enterprise failed, except when the manufacture of weapons of destruction was concerned. She fought again, and for once to conquer, but only to impoverish herself the more. We have known for some time past that her cargoes of grain as export produce have grown smaller and smaller; we have heard from travellers in her domain, like that bold and fine observer the Rev. Dr. LANSDELL, that, however fair her exterior, she was in danger on every hand; and now we realise where her chief danger lies,—not primarily, as many have supposed, in Nihilist conspiracies, nor in wars on foreign soil, but in plague, pestilence, and famine on Russian soil itself—famine set by Russian hands that might now have been opening the vast treasures which the soil only conceals, and by which, with less ambition for the conquest of men and more ambition for the conquest of nature, her Government might long ago have converted a starving people into one of the wealthiest and happiest on the face of the globe.

Let bygones be bygones; we are now in the presence of a great calamity, and it is our duty, as men of humanitarian science, to do all we can to enlighten everyone whom we are able to influence on a subject that must come home practically, to some extent, to everyone. The danger of famine is famine fever, and famine fever, when once it is established, is a disease which shows no respect to distinctions. It spreads from the famished to the unfamished. As we have seen it, famine fever is a special pestilence of the remittent type, very fatal, easily communicable, and running a course, when once it is lighted up, uninfluenced by any specific remedy. It is as if the starving people generated it, as the neglected occupants of the gaol, before the time of HOWARD, generated the malignant typhus which made the "Black Assize" and many more assizes equally black, the histories of which have never been told. It is a fever very unmanageable in respect to individual sufferers, and when it has gained its ground it is as unmanageable, in respect to its ravages, in communities. The grand sanitary manœuvre is to prevent its commencement. In the Irish famine we did not prevent its birth, and we know the cost that was paid for our negligence. In the cotton famine of Lancashire we succeeded in preventing its inception, and we have ever since felt the triumph of science in that success. We learned also in that triumph how comparatively easy a thing it is to accomplish success, even under great pressure. Whether the Russian authorities have the means at hand to follow our example let the special report we this day publish tell. The Russian peasant living on such bread as we have subjected to analysis and describe to-day must already be on the verge of starvation before his exposure to actual starvation begins. His tastes, moreover, are little cultivated for any new supplies that may be sent to him from abroad. These are ominous facts; but they should not stand in our way in the attempts to stop at its

beginning a disaster the end of which, if it be allowed to go on, must be perilous in these days of intercommunication to the whole world. How the assistance of this country can be best administered is a difficulty of supreme importance. Money we can raise; but money, like the bag of gold which the starving traveller found in the desert, hoping for his life-sake that the rich coins were dried nuts, may be more easily thrown away than usefully applied. For our part, we admit that at the present we do not see any method of application of means other than by the transportation of food. But what food can be sent to supplant the stuff we have analysed, and, in the face of the obstacles which lie in the way of distribution, how can the starving people be fed with what is offered to them?

THE severity and extent of the present outbreak of influenza are well calculated to excite apprehension, but to give way to unreasoning panic is foolish and reprehensible. Some of the comments made by irresponsible writers on the apparent impotence of medicine to allay this scourge seem almost akin to those ignorant outbursts of fury which in time of plague have led in some countries to the infliction of personal violence upon those engaged in caring for the sick. It is perhaps hard to maintain a philosophic calm when the people are perishing, presumably from "lack of knowledge," but at least credit should be given to the guardians of the public health for sparing no endeavour to understand the true nature of the malady that has so many singular features and visits the globe at such rare intervals. When the Italians gave the name "influenza" to the affection they did so in the belief that its visitations were connected with astral conditions, and doubtless at the time such an explanation was deemed sufficient. At any rate, it relieved men from the labour of seeking for mundane sources of origin. And it is possible that if some ingenious philosopher could formulate a theory of the disease somewhat more in harmony with science, and would adhere to it as the true and only explanation, many would feel satisfied with his explanation without further proof. Such a mode of solving pathological problems would not, however, be in accord with the spirit of modern research. The inquiry into the nature of so rare and remarkable a malady is complicated by so many circumstances that it requires a patience which is not invariably shown by those who clamour for more knowledge. The latest bacteriological investigations by Drs. PFEIFFER, KITASATO, and CANON have led to the discovery in the expectoration and in the blood of influenza patients of a hitherto undescribed microbe of very minute size and special properties, which so far has responded to the tests requisite to determine the pathogenic nature of such organisms, and has been successfully cultivated in nutrient media. The importance of this discovery is heightened by the now fairly general belief in the infectiousness of influenza.

Still it must not be forgotten that until the present pandemic, which began in the autumn of 1889, opinion was not only much divided as to the contagiousness of the disease, but rather, we would say, predominantly opposed to this view of its nature. Miasm rather than contagion, certain obscure atmospheric agencies rather than direct transmission of germs from individual to individual, were held to be most fitting to explain the remarkable phenomena it exhibits. The extreme rapidity with which the malady spreads over the surface of the globe, the simultaneity of outbreaks in widely separated countries, the similar general incidence upon large numbers of people at one and the same time, these and many other considerations weighed in favour of its non-contagiousness. Nor is it possible to entirely divest the mind of the idea that the disease is spread in other ways than by direct or indirect infection, although Dr. SISLEY—who is a leading exponent of the infectious doctrine—considers that general susceptibility or vulnerability, added to marked brevity of an incubation period, can explain all these apparent anomalies. Whether it be miasmatic or not, it is, however, indubitably infectious, and the resolution passed at the recent meeting of the Society of Medical Officers of Health conveyed this opinion in an authoritative manner, being thereby in harmony with the conclusion arrived at by Dr. PARSONS in his inquiry on behalf of the Local Government Board, and that which is said to have been reached by the German Collective Investigation Committee. It may therefore be taken as a postulate that one, if not the sole, mode of spread of influenza is by infection. What, then, is the logical outcome of such an admission? Clearly, some would say—and Dr. SISLEY himself advocates this in his interesting monograph—schedule the disease in the Public Health and Notification of Diseases Acts, and enforce the provisions of those Acts with all the rigour that the law demands. Unfortunately, from the very nature of the disease, the spread of influenza is not likely to be controlled by such a step. The meshes of the Act—although sufficient, doubtless, to arrest the progress of epidemics of other known contagious disorders—are not fine enough to retain within them so subtle a malady as this. It will elude them as easily as water will escape from a sieve; and it needs no extraordinary foresight to see that were the country to act, in respect to influenza, on the principles laid down in those enactments, the result would be a costly and disheartening failure. On a smaller scale, even, much disappointment might attend such isolation and measures of disinfection as can be practised in a household, and the adoption of which may be recommended. The "shortness of the period of incubation," adduced by Dr. SISLEY as one reason for its rapid diffusion, may evince itself in successive attacks of other members of the family, and render all such precautions of no avail, except as protecting new comers to the infected house. In his excellent exposition of the legislation in force in this country on infective diseases, in the paper read before the Society of Medical Officers of Health (*vide The Times*, Jan. 20th), Dr. SISLEY considers that had influenza been declared among the scheduled diseases before the prevailing outbreak much might have been done to limit its spread; but he also shows plainly that in the midst of an epidemic the time involved in the legal formalities of placing it on the list would render it practically impossible for the sanitary authorities to exercise any adequate influence on the spread of the disease. Dr. SISLEY is far more confident than at present we feel that we can be of the possibility of coping with influenza by prophylactic measures.

Although, then, there may be legitimate ground for disputing the efficacy of the ordinary measures of prophylaxis, there is a practical consensus of opinion as to the general lines of treatment to be adopted in the developed attack. There can be no question as to the advantage of having prompt recourse to rest in bed and a persevering administration of easily assimilable food, together with such special remedies as may be called for by the type of the disorder. Every practitioner knows that the manifestations of influenza are by no means uniform, that in some the headache, pains, and prostration, in others gastric or pulmonary catarrh, predominate, and he has to regulate his choice of remedies accordingly. Few are prepared to admit that, even with the adoption of all precautions, it is possible to ward off the supervention of severe bronchitis or pneumonia, which carries off so many of the weakly and the aged, or to prevent the protracted convalescence and the nervous sequelæ that characterise a certain number of cases. When, however, we attempt to realise the extent to which influenza prevails, and estimate its gravity in proportion to its morbidity, even the long list of fatalities dwindles to almost insignificant proportions. Still this is but small consolation, and the demand for some truly specific or antidotal remedy is perhaps natural. Many such have been introduced—some, to be sure, with little reason, and all based more or less upon theoretical considerations. There is, however, one remedy which, from its simplicity and from the very confident opinion expressed by its introducer, may be singled out, in order, if possible, to get some more general opinion as to its merits. We refer to the use of large and repeated doses (thirty grains every two or three hours of potassium bicarbonate, which Mr. CRERAR of Maryport introduced to the notice of his fellow practitioners in an address he delivered as president of the Border Counties Branch of the British Medical Association (and which appeared in abstract in these pages on Dec. 19th, 1891). We need not concern ourselves with the somewhat strained analogies and arguments adduced by Mr. CRERAR in that paper, or dwell on the fact that it is not possible from his address to perceive why he should have come to the conclusion that the influenza poison could be neutralised by increasing the alkalinity of the blood. We may fail to be convinced of his logic, and yet not refuse to accept his facts; and the evident sincerity of his statements, which, in a paper he has just forwarded to us, are supported by the experience of others, and particularly by the personal testimony of a well-known teacher in Edinburgh University, together with the results of the treatment in the wards of the Edinburgh Infirmary, seem to warrant some attention being paid to them. It is not necessary to give the text of this paper, which mainly consists in the citation of such testimony, but in justice to its author we may quote his conclusions as to the advantages of the method. They are:—

"1. If used before the attack it prevents the disease. 2. It destroys the power of the disease within twenty-four hours, generally within four or six hours. 3. The strength is conserved, and the convalescence is short and satisfactory. 4. Sequelæ are conspicuous by their absence. 5. The death-rate is reduced to a minimum. I have not had any death in more than one thousand cases. 6. It has more power over influenza than I have ever seen exerted by any method of treatment over any other disease, and I have had an extensive practice for upwards of a quarter of a century. 7. If adopted by the whole profession it would make influenza non-existent in one week. 8. It rests upon a sound scientific foundation."

The last two conclusions may be open to question, but the preceding are statements which no medical practitioner of standing would venture to put forward without good cause. Therefore, without in any way desiring to bias opinion, we have, after due consideration, deemed it only right to call attention to these statements in order that they may be put to the test. No doubt one's first impulse is towards incredulity, but *primâ facie* it can hardly be asserted that the method is unreasonable, although the administration of such large doses of a salt that has undoubtedly a depressing action on the circulation is surely a step to be taken with circumspection and care, especially in a disease so characterised by depression as influenza.

IT is now nearly nine years since the operations of the Contagious Diseases Acts were suspended in their most important feature, and seven years since they were wholly repealed. A sufficient interval has therefore elapsed to enable both their supporters and opponents to judge how far their action was justified. In THE LANCET of Feb. 7th and 14th, 1891, the results were given so far as regarded the reduction of disease in the army and navy, and, so far as could be ascertained from death statistics, among the civil population. These showed that, making every reasonable deduction for increase or decrease accountable for in other ways, or for fluctuations which affected all the military stations whether protected or unprotected, the reduction of disease at the fourteen protected stations was from the first persistently and markedly lower than in the other stations, whether the ratio of reduction was compared with that of fourteen unprotected stations selected for the purpose of comparison or with that of all the stations never under the Acts. In the naval stations the reduction was well marked in the ports protected by the Acts as compared with those which were not protected. With regard to the civil population, there was a remarkable diminution in the ratio of deaths from syphilis in those districts of the Registrar-General which contained the protected stations. Since the Acts were repealed all this has changed, and the diseases which these Acts were passed to prevent have reverted to the extent and severity which they showed prior to the passing of the Acts. But this reduction of disease, though it accomplished the purpose for which the Acts were passed, though of great importance to all interested in the wellbeing of the army and navy and of the State at large, is by no means the only good effects of these much-maligned and now repealed Acts. As one evil leads to another, so does an honest effort act in its good results far beyond its original designs. The object of those by whose efforts the Acts were passed was the honest desire to reduce the amount of venereal, and particularly of syphilitic, diseases, which then prevailed to an extent which a Select Committee of the House of Commons described as "appalling." This strong expression was not applied to any of the other diseases from which soldiers and sailors suffer in common with civilians,

from which it may be concluded that syphilitic diseases had gradually increased to such an extent and severity as to seriously alarm the authorities. Hence followed the Select Committee of the House of Commons in 1862, the first Contagious Diseases Act of 1864, the appointment in that year of the Select Committee of Physicians and Surgeons, of which the late Mr. SKEY was chairman, and later on the amended Acts of 1866 and 1869, and the Royal Commission of 1870.

The women who then surrounded the camps and abounded in the naval seaports were described in the report of the Royal Commission as "miserable creatures, who were mere masses of rottenness and vehicles of disease;" while one of the witnesses described the "soldiers' women" admitted into one of the metropolitan workhouses as "a very low, dirty class, the shame of humanity." It is not surprising, therefore, that the first Act contemplated rather the prevention of disease among them than their reclamation. But this omission was only temporary. These women, brought, some from their miserable dwellings and others who had no homes at all from their haunts, to hospitals where they were cared for and kindly treated, were first humanised, and thus rendered capable of receiving the benefit of religious influences. Their reclamation soon became a recognised part of the system, and the influence brought to bear upon these women by the chaplains, the matrons, and the medical officers was most successful. The Acts were not only successful directly in preventing and reducing disease, but also, indirectly, in reclaiming from a vicious life women whom society had left to perish, and whom even philanthropy had failed to reach.

Those, therefore, who have supported these Acts through evil report and good report may very fairly ask their opponents, You have closed ten Government lock hospitals; have you provided others in their stead? You have disestablished the chaplains, the matrons, and the medical officers, who were instrumental in reclaiming so many of these poor outcasts; have you provided any substitute for these? Is the "social evil" less rife in and around Aldershot, Chatham, Portsmouth, Plymouth, Cork, and the Curragh since the Acts were repealed? Is it better or worse in London, Birmingham, Manchester, or Liverpool, where the Acts have never been applied?

As the recent case of the Spinning House at Cambridge is still *sub judice*, any comment would be improper. But let it be supposed that a serious and earnest effort were made to prevent or diminish venereal diseases in the metropolis or any large centre, how could this be accomplished. There can be no doubt that these diseases are largely propagated by those women who make prostitution their means of livelihood. Many of these women, notably those of the lowest class, might still be called the shame of humanity. Would it not be to them a humane act to reach them by the aid of some machinery, whether by police or other aid, to ascertain by medical examination whether they are or are not diseased, to have the diseased conveyed to hospital and detained there till their maladies are cured, and to subject them to moral and religious influences? That some would be reclaimed cannot be doubted; that others would return to their old life is too probable. But there would be this difference between the proposed new and the present system, that at least something had been done to benefit their bodies directly, and their souls indirectly. THE LANCET has so repeatedly urged the importance of chastity in men, that the insinuation of wishing to make vice safe is one which, if raised, can be disregarded. The social evil has always existed, and it is to be feared will exist, so long as poor human nature remains frail and sinful. Much, however, might be done to diminish its worst features without in the slightest degree encouragin immorality.

Annotations.

"Ne quid nimis."

THE INTERNATIONAL SANITARY CONFERENCE AND THE SUEZ CANAL.

IT is not yet clear what will be the outcome of the International Sanitary Conference at Venice. A great deal of misconception appears to exist in regard to the subject of epidemic cholera. The current doctrine seems to be that India is its great home and manufactory, and the starting place of European epidemics, and that a system of maritime quarantine is consequently especially necessary and easy of application in the case of India, seeing that the Suez Canal is the channel of communication between that country and Europe. Now, what are the facts? A paper written by Dr. W. J. Simpson, the health officer at Calcutta, for the International Hygienic Congress of 1891, on "Maritime Quarantine and Sanitation in relation to Cholera," which has appeared in the *Indian Medical Gazette* for December last, puts these very clearly. Dr. Simpson fully believes that cholera, under certain conditions, is a communicable disease, and that its history in Europe and America shows that it has been carried in ships; but he nevertheless contends that it has never been carried from India to Europe by shipping, and that the chances against its being so conveyed to Europe through the Suez Canal are very slight indeed, for the simple reason that the population which is chiefly affected by epidemic cholera in India never travel by ships. The fact is that the religious and social conditions prevailing among the inhabitants of India enforce upon them a far more rigorous system than is imposed by any methods of quarantine. The native population of India mainly consists of persons of the Hindoo and Mussulman faiths, and it is among these that cholera epidemics occur. Now the Hindoo is prohibited by his religion from making a sea voyage to Europe. He would be excommunicated and cut off from Hindoo society in its social, religious, and political aspects. As regards the Mahomedans, on the other hand, they are not a migratory or maritime race and as a matter of fact are, as far as regards trade, as isolated by sea from Europe as the Hindoos who never stir from India. It follows therefore that the risk of cholera being imported from India into Europe is practically confined to the Europeans—civil and military—among whom cholera rarely prevails. Cases of cholera, no doubt, do occur, however, among the passengers by troopships and steamers; but the disease commonly ceases before the ships reach Suez; and, anyway, there is no record of an epidemic or outbreak of cholera in Europe having been traced back to India *viâ* the Suez Canal. That is not the way by which the disease has reached Egypt or Europe. On the contrary, there is every reason to believe that Dr. Simpson is right when he says we must not look to India, but to Mecca, as the place whence, and to the pilgrims assembling there annually from Europe, Asia, and Africa, by land and by sea, as the chan-

nels by which cholera is transmitted, and apply our sanitary regulations and precautions there. Be this as it may, it still seems to us that on the grounds of common sense and practicability it would be safer to send a cholera infected vessel straight through the canal to her destination without touching anywhere than to detain her at Suez in quarantine, for the disinfection of personal linen, &c., under conditions that would be likely to augment the risk of an outbreak rather than otherwise. It is assumed, of course, that the ships would pass through the Suez Canal as if it were an arm of the sea, and without any communication whatever with the shore. As regards Malta and Gibraltar, the fear lest the commercial relations of these places with other maritime countries would be jeopardised, to say nothing of the timidity of their native populations, would probably lead to all the cholera-infected vessels being put in quarantine at those stations.

HOW TO IMPROVE THE POSITION OF THE PROFESSION.

DR. ORLANDO JONES, in his presidential address to the Harrogate Medical Society, took for his subject the Possibility of Improving the Position of the Medical Profession. He infers from the writings of Pliny, the medical learning of the Druids, and from those of Ptolemy that their wealth was equal to their learning. Such being the honoured and happy case of the ancient representatives of medicine, he argues that it should not be otherwise with its present practitioners. He does not seem to look for any amelioration in the position of the profession by attacking the Council of the Royal College of Surgeons, or by a mere increase in the direct representation of the profession in the Medical Council. These are his negative views. The first of his positive suggestions for improving the tone of the profession is the introduction of a law enforcing at least one year's apprenticeship before the commencement of medical study; the second is the formation of a fund for the benefit of the profession, encouraging thrift among the active and giving help to the less fortunate. There is something to be said for both suggestions, but we confess to thinking them entirely inadequate as the sole levers by which the positive tone and power of the profession are to be raised.

A FRAUDULENT UNDERTAKER.

IT is much to the credit of the large class of men and women who conduct funerals, and have many opportunities of resorting to irregular practices for the sake of gain, that so comparatively few charges are brought against them. The few irregularities which do occur generally come to light sooner or later, and the exposure, together with the fine or imprisonment which follows, must mean ruin to the prisoner so far as his calling is concerned. The most recent case is that of an undertaker who was summoned before Mr. Baggallay at the West Ham Police-court, at the instance of the local superintendent registrar of births and deaths, for burying the body of a child aged ten days in the coffin containing the body of another child sixteen days old. Mr. Lynch, the barrister, who prosecuted, described the case as a cruel fraud upon poor people, and the worthy magistrate emphasised this even more strongly. It appeared that a woman named Healey lost her child on Oct. 8th last. It was only ten days old, and its mother, who was still ill, saw the body of the child placed in the coffin, which was brought to the house, screwed down, and taken away. The birth and death were registered, and the burial order was sent to the defendant's place of business, and on the 10th he sent her word that the child had been buried in the East London Cemetery, giving her the number of the grave. Later on Mrs. Healey went to the cemetery to visit the grave of her child, and not being able to find the number of the grave she communicated the fact to the cemetery authorities, who subsequently found that the body of Mrs. Healey's child had been buried with a child named Walker. The defendant had therefore defrauded the cemetery authorities and acted in contravention of the Registration Act, which requires the burial order to be delivered to the cemetery authorities. But this was not all, since in this as in similar cases one fraud leads to another. The child Walker being sixteen days old, the defendant had altered the figures in the burial order to eleven days, his object being to save 2*s.* 6*d.*—the difference between a child under twelve days and above that age. The defendant wanted to hush up the matter by paying a few shillings, and when this was refused he declined to say in which of three cemeteries the child's body had been buried. He also said that he had done the same thing many times, and that all undertakers did it, which we hope and believe is untrue. He was fined £10, with £2 14*s.* costs, with the alternative of two months' imprisonment. The fine was paid. Some years ago the bodies of four newly born infants were found in the coffin of an adult, and it is chiefly with newly-born children, stillborn or surviving their births from a few minutes to a few weeks, that these frauds and breaches of the Act occur. A sliding scale of fees is indispensable, but it would be more reasonable if it referred rather to the space occupied by the body than to its age. To poor people it must seem inexplicable why they should have to pay what to them is a very serious sum because a child lived a few minutes or because it died on the twelfth instead of the eleventh day after birth. Many a stillborn infant weighs and measures much more than a prematurely deceased infant, and yet the fees for the latter are often double those of the former. Perhaps some scheme may be adopted which will not hold out inducements for fraud in the burial of infants, and appear less arbitrary to those upon whom the expense falls.

THE CENTRE FOR HEARING.

A CASE of no little interest and importance in this connexion is recorded by Dr. C. K. Mills in the current number of *Brain*. The patient, a woman of forty-six, was admitted to hospital in August, 1891. Her history made it probable that she had suffered from specific disease. She was right-handed. Fifteen years before she had a "stroke," which left her word-deaf, but not paralysed. She could hear musical and other sounds, but she could not understand words; yet she could apparently read and understand a paper, although in an attempt at reading aloud she made a jumble of the words, and a similar imperfection was present during ordinary attempts at speaking. She was able to write, but wrote wrong words. Six years later she had another stroke affecting the left side of the body, and leaving her partially paralysed on that side, and then her hearing was much impaired, so that there was not only word-deafness, but deafness also for ordinary sounds. Her condition, when examined by Dr. Mills, was one of almost complete helplessness. It was impossible to make her understand what was said to her, and after repeated tests the conclusion was come to that she was totally deaf. She died of exhaustion, and at the necropsy the left superior temporal convolution was found to be much atrophied, except anteriorly. In the posterior fourth of the second temporal convolution and the parallel fissure was a depression or cavity, at the bottom of which was a small mass of shrivelled tissue, which was regarded by Dr. Mills as the remains of an old patch of softening. The rest of the temporal lobe was normal, but there was a considerable amount of atrophy around the ascending branch of the Sylvian fissure and the bases of the two central convolutions, as well as in the hinder part of the third frontal. In the right hemisphere was an old hæmorrhagic cyst, completely destroying the first and almost

completely the second temporal gyrus, the island of Reil, and the convolutions behind, as well as part of the ascending convolutions and of the central substance. The auditory nerves were atrophied, and the striæ acousticæ are said to have been invisible to the naked eye. From this case Dr. Mills thinks he is justified in contending that the centre for word hearing is situated in the hinder thirds of the first and second temporal convolutions, and is possibly restricted to the second, and that although the auditory cerebral arrangements have their chief development in the left temporal lobe, destruction of the opposite centre is necessary in order to abolish hearing entirely. Several minor conclusions are also drawn, but the above are the most obvious.

NEW WATER-SUPPLY FOR DANBURY.

AN excellent water-supply has been provided for Danbury in Essex, and the arrangements have been ingeniously and skilfully carried out. Spring-water, certified as pure by Dr. Thresh, is first collected in a reservoir, and it is then passed down to a hydraulic ram, by means of which it is lifted 180 feet through a rising main of about one mile in length. Thus, by gravitation, the inhabitants are supplied with some twenty-five gallons a head per day of wholesome water at a cost which will be entirely covered by a small and reasonable water-charge. It is stated that there is not another ram in England working with a 27 feet head and throwing water to such a height as has been effected with success at Danbury. The scheme is, from this point of view, worthy of the attention of the sanitary authorities of rural and small urban districts.

EXPERIMENTS WITH THE PNEUMOCOCCUS.

AT the present time, when pneumonia is exceptionally prevalent, it may be well to recall the investigations conducted last year by Drs. G. and F. Klemperer, and published in the *Berliner Klin. Wochenschrift*[1] in August last. They then detailed experiments, the practical outcome of which may possibly be of real therapeutic importance. It is known that in most cases pneumonia, after having during from five to seven days caused grave general symptoms, terminates abruptly by crisis. At this period there has been little or no change in the state of the lungs, which still remain infiltrated with fibrinous exudation, or in the properties of the pneumococci, which are found in great numbers in the sputa and retain all their virulence. On what, then, does the pneumonic crisis depend? Only one explanation seems possible: the crisis is due to the products of the organisms, which, by their accumulation, modify the soil on which the microbes develop. In their experiments made on rabbits, the investigators observed that any nutritive substance which had served as a culture medium for the pneumococci, even if it had been separated from the microbes by filtration, conferred on the animal immunity against the pneumonic infection. They next proved experimentally that the blood serum of a rabbit "vaccinated" against the pneumococcus may cure an animal infected with pneumonia. An intravenous injection of eight cubic centimetres of serum of an animal rendered refractory, practised twenty-four hours after the infection, produces a gradual fall in the febrile temperature, and hastens the recovery of the animal. In another series of researches, devoted to the study of the cause of the remedial action of the serum of inoculated animals, the same observers found that the pneumococcus, when introduced into the body of an animal, gives rise to the production of a "pneumotoxine," which may be isolated. This pneumotoxine produces a febrile reaction of several days' duration, after which they have noted in the fluids of the animal another substance, "anti-pneumotoxine," which has the power of neutralising pneumotoxine. The blood serum of an animal on which immunity has been conferred contains anti-pneumotoxine, and it is this which seems to forward the recovery from the pneumonic infection. In the blood serum of patients affected with croupous pneumonia, they have also found pneumotoxine and anti-pneumotoxine, the former chiefly during the febrile period of the disease, the latter after the crisis. They also claim to have treated successfully rabbits suffering from pneumonia by injecting into these animals blood serum taken from a pneumonic patient after the crisis. Being assured by experiments made on themselves that man may support with impunity and without any local and general reaction injections of the serum of animals rendered refractory to Fraenkel's pneumococcus, the investigators treated six patients affected with pneumonia. Although the number treated was small, the result has been very encouraging. In fact, in all these patients a hypodermic injection of from four to six cubic centimetres of serum was followed at the end of from six to twelve hours by a considerable fall in the temperature, with slowing of the pulse and respiration. These observations are especially noteworthy as confirming those made by Emmerich and Fowitzky, who claim that they have conferred immunity on the rabbit by means of hypodermic injections of attenuated cultures of the pneumococcus; but this immunity, they say, is incomplete. On rabbits infected by pneumococci, on the other hand, full immunity is obtained by intravenous injections of a culture having its entire virulence, but largely diluted. The liquid obtained by crushing the organs of an animal thus rendered refractory exercises on the pneumonic infection a sure remedial action when it is injected under the skin or into the abdominal cavity, and especially when it is thrown into the veins of the infected animal.

[1] Abstract in the Boston Medical and Surgical Journal, Nov. 12th, 1891.

THE MILITARY HOSPITALS IN UPPER EGYPT.

AT the conclusion of his recent tour of inspection in Upper Egypt, Major-General Walker, commanding the army of occupation, directed a letter to be written to the officer commanding the frontier field force in which General Walker, among other subjects connected with his inspection, referred to the condition of the hospitals with which, he said, he was particularly pleased.

THE PASTEUR INSTITUTE AT MILAN.

WE have before us the committee's report of the working of this institution—"Istituto Antirabico Milanese," as it is officially called—for the two years that have elapsed since its foundation, and a most interesting document it is. Financially, the Institute is in a flourishing condition, thanks mainly to the liberality of local business houses, seconded by careful management. Therapeutically it has more than justified its establishment. Dr. Remo Segré, its director, having passed in review the various methods of combating the canine virus in the human subject, decides most emphatically in favour of that of Pasteur. His statistics, checked in every possible way, certainly bear out his decision—the one modification he ventures to make on the method of his master being as to the dose of the matter inoculated. This he would certainly increase, even in the case of children. Dr. Segré uses a syringe of two grammes and a half, and employs an entire centimetre of marrow for each patient. He obtains an emulsion much denser, and therefore richer in the remedial principle. "It is notorious," he adds, "that children form the larger contingent of our patients and have a greater receptivity for the canine virus than adults. A more energetic action of the remedy being therefore required, he gives the child as large a dose as the grown man. On the system of the parent Institute at Paris,

he divides the patients under treatment into four categories. The first, in his report, includes 108 persons bitten by hydrophobic animals whose rabies was confirmed by experiment in the laboratory, or bitten by animals whose bite was followed by death from hydrophobia in other persons. In this category, out of 108, there were but two deaths. The second category comprises 121 cases of persons bitten by animals whose rabies was tested and reported by a medical man or a veterinary surgeon. In this again, out of the 121, the deaths were only two. The third category contains nine doubtful cases. In this no death occurred. The fourth and last category is made up of cases "remanded"—that is, of persons bitten by dogs or animals, but in whose cases the evidence of being bitten was not sufficiently complete to justify their being subjected to the Pasteur treatment. This, of course, includes no deaths in Dr. Segré's report. He claims a lower percentage of mortality than can be shown by any other Pasteur Institute on the Continent, and some of his remarks are of interest as evincing the care he bestows on the subjects brought under treatment. Having shown that male cases are more numerous than female, and that children are more often bitten than adults, he observes that the more the bites on a patient and the more various the parts bitten, the more probability is there that the animal is hydrophobic. With regard to the four deaths that occurred after treatment, he says that cauterisation had been practised on all, and without loss of time; with the actual cautery, moreover, which is considered the best in such lesions. This fact of the greater mortality occurring among the cauterised is in absolute keeping with the statistics of the Pasteur Institute at Paris. Dr. Segré adds that a prompt cauterisation, made within half an hour after the bite, has always a certain value, but it must be a liberal cauterisation, deep and, above all, immediate; otherwise it is useless or worse. He concludes by saying that the Pasteur method is not absolute. It does not save all hydrophobic patients, just as quinine does not cure all malarias, or salicylate of soda all rheumatisms, or mercury all cases of syphilis; while each of these remedies has a specific action which no one doubts. In like manner the Pasteur method, though not invariably successful, has the incontestable merit of having greatly lowered the mortality from hydrophobia, and may yet be so far perfected as to reduce the victims to the fell malady to an almost inappreciable minimum.

THE LONDON WATER-SUPPLY.

MESSRS. CROOKES, ODLING, and TIDY, on behalf of the directors of the water companies, report that during the month of November of the 175 samples examined all were found to be clear, bright, and efficiently filtered. Throughout November the condition of the water-supply to the metropolis, although, by reason of the continued exceptionally flooded state of the rivers, falling short of the standard usually maintained at this season of the year, showed an appreciable improvement on that prevailing during the latter part of the preceding month. This improvement is greater than would appear from a mere comparison of the mean results afforded by the examination of the two months' respective supplies, the means afforded by the previous month's supply having been kept down by the good results furnished in the early part of the month, before the effect of the floods began to be seriously felt. Dr. Frankland, on behalf of the Local Government Board, says in his report that the water abstracted from the Thames by all the companies, except the Chelsea, was, in respect of organic contamination, of much better quality than that reported upon last month; but the water delivered by the Chelsea Company, which was by far the best in October, was the worst in November, and contained no less than 73 per cent. more organic matter than that supplied by the Lambeth Company on the same day. All these waters were efficiently filtered. The water taken chiefly from the Lea by the New River Company was only slightly better than the best of the Thames waters, whilst that obtained from the same river, but lower down the stream, by the East London Company was inferior to all the Thames waters, except that supplied by the Chelsea Company. Both companies sent out efficiently filtered water. The deep-well waters of the Kent, Colne Valley, and East London Companies, and of the Tottenham Local Board of Health, were, as usual, of excellent quality for dietetic purposes.

THE SICKNESS AMONG THE TROOPS IN BURMAH.

WE gather from a telegram to *The Times* of the 18th inst. that much sickness prevails in Upper Burmah. The Cornwall Regiment at Meiktila have suffered severely from enteric fever. Cholera is stated to have broken out amongst the coolies accompanying the columns in the Chin hills; and glanders is prevalent among the transport mules, much embarrassing the commissariat arrangements. We also gather from the same source that General Sir James Dormer has published a district order since his inspection of the garrison in Burmah, in which he finds fault with the medical arrangements for the care and comfort of the sick in the military hospitals. The *personnel* of the military medical service is wholly insufficient for the wants of Burmah. We are glad to learn that the present unsatisfactory state of affairs is not attributable to any want of energy or devotion on the part of the medical staff, but to the fact that they are short-handed and altogether overworked. It appears the administrative districts in the Burmah command are of enormous extent, and the medical staff is quite inadequate to the requirements. The Indian Government, it is alleged, cannot plead ignorance of the facts, for they have been repeatedly, but vainly, brought to notice; and the Government recently refused to add another administrative medical officer to one of the districts. Assuming the facts to be as stated, of which we fear there is little doubt, they speak for themselves, and require no comment.

EFFECTS OF SULPHONAL.

IN the *Journal of Mental Science* for the current month Dr. Carlyle Johnstone records his observations on the effects of sulphonal on fifty patients suffering from various kinds of mental disorder, including general paralysis, melancholia, and mania. His experiences with the drug point to the conclusion that in properly regulated doses it is an efficient hypnotic, and, compared with that of other hypnotics, its action is fairly certain and constant. The sleep produced by it is natural and undisturbed by dreams; it has no injurious effect on the appetite, circulation, respiration, or temperature, and the general health does not suffer under its use. After a time the dose may be reduced, or it may even be discontinued, and the patient still continue to sleep well. Dr. Johnstone also found that it had a distinct sedative action in mental excitement and distress, and could be employed with great benefit in cases of insanity, especially such as are of recent or acute character. Its complete tastelessness also is a recommendation in such cases, allowing its combination with food or in milk in such a way as to escape the notice of the patient. The chief drawbacks were found to be its slowness of action, and often the persistence of its soporific effect during the succeeding day, together with at times confusion, giddiness, and fatigue. After repeated doses a dreamy confusion was noticeable, and subsequently slight weariness and fatigue, followed in a few cases by enfeeblement and shakiness of

locomotion; but nothing occurred which could be called an alarming symptom. As a rule, indeed, the mental condition improved, the excitement, irritability, and motor restlessness being diminished and the wretchedness dispelled. It will thus be seen that the writer's conclusions are in accord with the majority of those already published, and that, while regarding sulphonal as by no means a perfect hypnotic, he is inclined to give it a very important place in the treatment of sleeplessness and restlessness generally. The best doses he found to be between thirty and forty grains, and it should be given just before the patient lies down. The freedom of the drug from taste and smell, as has been said, is one of its advantages, and renders its administration easy.

THE PREVENTION OF RABIES.

WERE it not that experience has fully proved, both in England and on the Continent, the efficiency of the muzzle as a preventive of the spread of hydrophobia, we might excuse the delusion that the disease lately so prevalent in this country has died a natural death. The facts mentioned in THE LANCET of April 5th, 1890, however, show too close a connexion between the prophylactic method and its effect to admit of any real doubt upon the subject. The past year has been a period of probation. The immunity conferred by the muzzling order has not, perhaps, unnaturally been taken as justifying its discontinuance in favour of the less irksome system of collar registration, and so far, there is every reason to believe, with fairly satisfactory results. In this way such cases of rabies at least as arise among stray dogs, and they comprise the greater number, should, if the regulations are stringently enforced, be held in check. Of the efficiency of the muzzling system and the justice of its application two years ago we cannot entertain a doubt. In its absence registration is and must remain for some time to come quite indispensable. It is difficult indeed to see how, without some such preventive arrangement, security against the disease can be relied upon. We trust, moreover, that, on the least sign of a recrudescence of the disease, in the interest of our faithful friends the dogs as well as of the human race, muzzling may again be strictly enforced.

DEATH FROM ATTENDING FUNERALS.

IT is one of the privileges of members of the medical profession that they have the opportunities of seeing the various abuses incidental to our everyday life, and of suggesting the remedies, which, however, are not generally heeded. By the death of the Duke of Clarence and Avondale the public mind has been thoroughly aroused to the danger which has for years past been repeatedly pointed out in these pages. All the various suggestions now made as to keeping the head covered and shortening the service at the graveside, so far from being original, as the various correspondents would appear to imply, were suggested in THE LANCET years ago. Our local correspondent forwarded to us details of the death of a leading Liverpool citizen whose death was the direct result of a chill caught while standing bareheaded at a funeral, and at his own funeral, which followed but a fortnight after, the attendant relatives and friends were requested to remain covered. Now that attention is strongly drawn to this painfully important matter it may be profitable to supplement the preceding with some further remarks. None should attend funerals in such weather as now prevails except those who are in robust health; the aged and those whose health is in any degree delicate should be absolutely forbidden to do so. It is not only at the graveside that fatal chills are acquired. Cemetery chapels are proverbially chilly places, and it is to be feared that care is not taken to sufficiently warm them previously. This is all the more imperative, since in cold and inclement weather the whole of the service (except what must necessarily be said at the grave), and particularly any address or panegyric on the deceased, should be said in the chapel. Some clergymen who wish strictly to obey the rubrics may object to saying in the chapel what is ordered to be said at the graveside. We would point out, however, that there is one rubric which it is necessary to disregard—viz., the dipping of an infant into the water at baptism. In spite of the plainest words which a rubric can have no child is dipped however "discreetly and warily," and the attendants are not even asked whether the child "may well endure it." Whether the rubric was ever obeyed is a question which has never been satisfactorily answered; it is enough that no infant should be subjected to such a risk. By a parity of reasoning it may be urged that the attendants at funerals ought not to be exposed to a similar danger.

CARDIFF AND IMPORTED INFECTION.

A PROPOSAL is before the Cardiff corporation, in their capacity as port sanitary authority, to place on a more permanent and efficient footing the sanitary inspection of vessels entering the port, the more especially with a view to prevent the importation of infection. To fulfil the various requirements which are held to be necessary by Dr. Walford, the port medical officer of health, it would be requisite to employ a steamer, which should be constantly at the disposal of the port sanitary staff, and to add one or more inspectors to the staff. Cardiff has more than once been thus compelled temporarily to widen the scope of port inspection, and has doubtless found the hire of a steamer costly; but, if such an arrangement as is now proposed were adopted as a permanent measure, the port would be much more secure as regards imported infection, always a source of expense and of possible panic, and hindrances to commerce would, to the utmost, be prevented. Other ports, such as the Tyne port, have long since adopted a similar system, and it can hardly be otherwise than an advantage at Cardiff, where the circumstances of the port in relation to the Bristol Channel tend to present somewhat exceptional difficulties under the system now in operation.

PROFESSOR GAIRDNER ON CLINICAL INSTRUCTION.

PROFESSOR GAIRDNER, whose interest in clinical medicine, and especially in clinical teaching, is unsleeping, has been reading Sir Andrew Clark's lecture and our leading article on the subject, and kindly forwards us a lecture, introductory to a course of clinical medicine, which has never been published, but which is a type of one he is in the habit of giving to his students in printed form. It treats of the real import and method of clinical instruction, and, we need not say, goes thoroughly to the root of the matter, insisting that both instructor and instructed are to be in the presence of the patient, and learning the lessons of disease together from the absolute source of all real and final knowledge in respect to disease—*the sick man*. The lessons of a practitioner to his apprentices in the days when apprenticeship still existed were true clinical instruction; and with such a man as Abercrombie, who practised this method exclusively, they must have afforded clinical instruction of the best and highest kind. Dr. Gairdner adds that a well-conducted dispensary, in which the physicians not only see the patients at the dispensary, but follow them up at their own homes and along with their pupils, is also a very fruitful and admirable field for true clinical instruction, and one which only requires competent and devoted men to make it at least equal, if not superior, to any other. Strange to say, however, neither of these is

counted as formal clinical instruction in the curriculum of study. Dr. Gairdner affirms such kind of instruction to be desirable, and regards it as a modification of the German *Poliklinik*, or clinique of the town. With his usual precision, he indicates the only limitations to the usefulness of this mode of instruction. The one is the limited number of men fit for such work, and the other is the risk of "hurry-scurrying" through thirty or forty cases in an hour, as sometimes must occur in the out-practice of hospitals. It is one of the recommendations of more private lessons, as in dispensary or general practice, that, being given in the very homes and houses of the patients, there is the more guarantee for that humane and considerate treatment of the patient and for a certain amount of thoroughness on which both Sir Andrew Clark and Professor Gairdner so properly insist. There are surely among the many thousand practitioners of Great Britain not a few who could give most valuable lessons in the art of detecting and treating disease. The remainder of Dr. Gairdner's lecture deals with the importance of right methods of clinical instruction, the place of clinical lectures, the physician and the patient and the ethics of a clinical course, the details of clinical work, the verification of details, and the composition of clinical lectures proper. He thinks that a hospital patient, as compared with a rich man, derives immense benefit from the methodical investigation of his case. He allows that "lecturing" is often overdone in clinical teaching, and he insists, as all good teachers do, on treating the student and even his mistakes with respect. It is clear that the methods of clinical instruction are about to receive more attention than ever, and they both deserve and need such attention.

BURIAL REFORM AND THE CITY CHURCHES.

AT a recent meeting of the Church of England Burial Reform Association, held in the vestry of St. Edmund the King, Lombard-street, under the presidency of Archdeacon Sinclair, allusion was naturally made to the recent disclosures at the neighbouring church of St. Mary, Woolnoth. The Rev. F. Lawrence, the indefatigable secretary of the Association, observed that all the officials of the last-named church had suffered from sore-throats in consequence of the foul air in the church arising from the large number of dead bodies in the vaults beneath. He quoted the words of Sir John Simon, to the effect that the most successful hermetical sealing of dead bodies might retard, but could not possibly prevent, the escape of poisonous gases which mingled with the air in the church above, to the great detriment of those assembled there. The experience at St. Mary's only added another example to the several other City churches which had been rendered equally unwholesome. The bodies entombed beneath that church will have to be removed and buried in some suburban cemetery, as is generally done now, and as should have been done always.

PERITONITIS FROM PERFORATION OF THE INTESTINE IN UTERO.

DR. ANTON GENERSICH of Clausenburg recently exhibited at a meeting of a Hungarian Pathological Society a case of peritonitis occurring in an infant which had doubtless originated from perforation of the small intestine before birth. He referred to Dr. Zillner's report of several somewhat similar cases where the sigmoid flexure had been ruptured, the explanation proposed by Dr. Zillner being that the rupture was due to distension by meconium of a coil of intestine fixed between the vertebral column and the abdominal walls. He considered that pressure and distension of this kind must occur even in normal parturition; but this view is combated by Dr. Plataut, who insists that the rupture is due to fæcal accumulation without any external mechanical cause, such as the pressure exerted in labour. In Dr. Generisch's case an abscess containing meconium had formed under the umbilicus, this abscess communicating with the ileum by means of an infundibuliform passage. The extent and character of the granulations, which had become calcareous in some places, and the firm adhesions in the neighbourhood of the lesion, showed that the perforation must have taken place some time before birth, as the child only lived forty-five hours. It is probable that the pressure during birth and the entrance subsequently of pathogenic bacilli through the alimentary canal caused a sudden increase of the peritonitis as well as the phlegmonous inflammation of the abdominal walls. The spontaneous perforation of the ileum is, as has been well pointed out in this country in somewhat similar cases by Mr. Bland Sutton, intelligible only by referring to the embryology of the intestines. A small Meckel's diverticulum may have been split on the spontaneous reduction of the normal umbilical hernia, or the obliteration of the physiological umbilicus may have remained incomplete, so that on the retrogression of the umbilical coil of intestine a small aperture was left, from which the meconium percolated into the peritoneal cavity, subsequently becoming encapsulated by adhesions between the intestines, the omentum, and the abdominal walls. The latter view is the one which Dr. Generisch considers the most applicable in the present case, as a most minute examination resulted in finding no vestige of a diverticulum, while the large intestines were found to be rather thin.

IS CHELMSFORD WATER-LOGGED?

AN increase of diphtheria in the town of Chelmsford, taken together with the now admitted circumstance that the diffusion and maintenance of that disease are in some way related to damp and cold soils, has raised the question as to whether this Essex town is water-logged or not. This is a matter which ought long ago to have been set at rest, for it is no less than twenty-six years since Dr. Buchanan presented to the Privy Council Office his classical report on the relation of phthisis to subsoil wetness, and in this he quoted the case of Chelmsford as one of the crucial proofs of his contention. He then showed that in a number of towns where deep sewerage had lowered the subsoil water there had been a remarkable diminution in the rate of phthisis mortality; but when he came to Chelmsford, where works of equal importance had been carried out, no vestige of any corresponding diminution of the phthisis death-rate could be discovered. The explanation, he maintained, lay in the fact that mill-rights, with their corresponding flood-gates below the town, held up the river water, and so prevented any reduction of subsoil wetness beneath the town. If ever there was a case for immediately securing the benefits elsewhere obtained by the result of deep drainage it was at Chelmsford, and many have doubtless come to the conclusion that the story of 1866 is a matter of curious past sanitary history. Such observers will be astonished to find that a discussion has recently taken place in the Town Council on the subject, "Is the town water-logged?" and that the question still arises in 1892 whether the heading-back of the river water at such places as Moulsham Mill shall be prevented by purchasing the mill rights. The most that could be said at the meeting was that the whole of the soil beneath the town was not water-logged, the South Ward standing upon a comparatively dry surface. But, as regards the remainder of the town, it would seem that matters stand just where they have done all these twenty-six years in which Chelmsford has served as witness to the injurious effects of a maintained high level of subsoil water. Now that the matter is again

to the fore it is to be hoped that there will be no hesitation in dealing with it; and in the meantime it would be interesting if those who are fully acquainted with the actual facts affecting the South Ward from a hydro-geological point of view, and who have access to the vital statistics, were to work out the incidence of the phthisis mortality between 1866 and 1892 on the South Ward and the remainder of the town on the same lines as Dr. Buchanan did in his original report.

POVERTY OF HOSPITALS.

THE *City Press* draws a doleful picture of the shrinking subscriptions to the metropolitan hospitals, and prophesies that, unless both the existing deficit be wiped off and the annual subscriptions increased, these noble and voluntary institutions will soon become State hospitals supported by public rates. It takes a gloomy view of the change of spirit and administration which will follow this radical change of support. There is, no doubt, too much reason in the fears of our contemporary, and we earnestly trust that its comments may be so studied by the rich men of the City that this dire misfortune may be averted, and that the voluntarily supported hospitals may continue to be among the "glories of England." It will contribute to this end if all promoters of new hospitals be discouraged, and the charity of the metropolis concentrated on the maintenance of the existing ones.

CREMATION, BURIAL, AND EXHUMATIONS.

IN THE LANCET of Jan. 2nd, page 42, in an annotation on burial reform and its legal regulations, it was observed that "no other method can ever so fully satisfy the possible needs of a criminal investigation as that which allows the exhumation of the body." While fully maintaining the soundness of this position, it is at the same time most important that this should not be made any excuse for haste, carelessness, or an undue desire to oblige in the giving of a certificate of death on the part of medical practitioners, in registering a death on the part of registrars, or in burying without a burial order on the part of cemetery or churchyard officials. For although the body may remain in the ground and be available for exhumation, post-mortem examination, and chemical analysis, all these may be in vain, and a medical certificate given with an imperfect knowledge of all the circumstances surrounding the last illness, followed by a hasty burial, may defeat justice as completely as if the body had been cremated. This must be rendered more probable if burial reform grows in favour as it is hoped it will. For although much valuable information may be obtained by an examination of bodies even in an advanced state of decomposition, and though toxicological science may detect poison after months and even years of burial, still pathological and chemical research both have their limits, and some poisons could be named which would defy detection even within a short period after death. In every or any case of death from poison or other unfair means, it is much better to detect this before rather than after the body has been committed to the grave. The two following cases will prove the truth of the preceding remarks. For obvious reasons the names of persons and localities are suppressed. Some years ago a man went to his work in his usual health at his usual hour one morning. He returned to his dinner, after eating which he was seized with convulsions and died. A surgeon examined the body and gave a certificate, and the body was buried. Some weeks after suspicious circumstances came to the knowledge of another surgeon, who succeeded in causing the exhumation of the body, its examination, and the despatch of the viscera to an eminent analytical chemist. Strychnine was indicated by the symptoms as the poison which had caused death, but it could not be detected even by the most refined processes adopted by the analyst first employed, nor by a second one to whom the viscera were also sent. The bodies of two children whose deaths occurred previously were also exhumed, but the chemical inspection of the viscera was also negative. A person was put upon trial for murder, but although the case was a most suspicious one, the non-detection of poison was fatal to a conviction, and the prisoner was acquitted. In the second case a child died under circumstances which aroused the suspicions of one of the two medical attendants, who were respectively a retiring and a remaining partner. The former was dissatisfied with the mother's manner and puzzled with the symptoms, which were not those of any natural form of disease incidental to childhood. A second child died very soon after, and a certificate was given and the body buried. Later on the husband and father was taken seriously ill with similar symptoms, but fortunately was saved by copious vomiting and violent walking exercise. Lastly, the wife and mother was also suddenly seized with similar symptoms and arrested on a charge of attempted suicide. Then followed a full inquiry, with exhumation of the two bodies and the detection of morphia. The prosecution had to contend with the difficulties which will always arise where a charge of murder is preferred some time after the death of the victim and when the circumstances are not fresh in the memories of the various witnesses, and the woman was acquitted. Still greater is the difficulty when a medical witness has to avow having given a certificate of the cause of death which was palpably incorrect, when those who make the necropsy have to deal with a decomposed corpse, and when the analyst endeavours to detect a vegetable alkaloid under circumstances very unfavourable to its discovery.

MATERNAL IMPRESSIONS AND DEFORMITIES IN CHILDREN.

THIS always interesting subject is again discussed in an article in the *Glasgow Medical Journal* by Dr. Halket. He first of all enumerates the cases of congenital deformity which had occurred in his own practice, and then some of these are discussed with reference to their connexion with experiences of the mother during her pregnancy. While fully recognising the great difficulty there is in reasonably regarding deformities as definitely connected with maternal impressions, Dr. Halket is strongly impressed with the cases which have been put on record by men of undoubted standing and unimpeachable veracity in which such a connexion seemed extremely probable, and his own experience has strengthened the impression that the connexion between certain deformities and mental states which the pregnant mother has experienced is occasionally at least something more than a mere coincidence. In one of his cases the child was a boy, the second child of his mother, and the first child was healthy and well-formed. The child under consideration had his nose only partially developed, there being only one nostril. The right eye was situated much further back and at a lower level than the left eye, and the child was unable to close it. On the right side of the forehead there was a small growth half an inch long, tipped with bone, which looked like a small horn. The child was otherwise strong and healthy, and lived till it was fifteen months old, when it died of acute bronchitis. This child's mother was the wife of a drunken husband, who was not unaccustomed to kicking and otherwise maltreating her, and to the mechanical effect of this violence, and not so much to mental effects, Dr. Halket is inclined to attribute this deformity. But perhaps the most interesting case of all is one in which the child was born alive without the index and middle fingers of one of its hands. The mother was a young woman, who knew nothing about maternal impressions, and as soon as she knew of the deformity she

volunteered the information that she had to work for some months after her marriage, and that the foreman under whom she worked had lost two fingers through an accident, and that when she saw his hand for the first time she had a "grueing" or shivering, and that every time she saw him she could not keep from thinking of his deformed hand. The other cases which Dr. Halket relates are for the most part deformities which he ascribes not so much apparently to some actual isolated impression made on the mother as to habits of intemperance, to prolonged grief, or to anxiety which would in all probability have a very bad effect on the child in utero as well as upon the mother, but why a certain deformity should result, such as cleft palate or harelip, seems to be rather difficult of explanation. The subject is an obscure one, though interesting. If these deformities following mental impressions are only coincidences, they are very striking in some cases; and if, on the other hand, there is any causal connexion between the impression and the deformity, it is very difficult, if not impossible in the present state of our knowledge, to explain its *rationale*.

THE CLAIMS OF SANITARY SCIENCE UPON THE CLERGY.

IN the physical world we look in vain for sudden transitions in structural arrangement. Changes and differences abound, indeed, but all is relative and gradual. So likewise it will doubtless be found that the more we learn of its spiritual counterpart the clearer will be our evidence that there too the same rule holds good. Facts which on their occurrence may appear singular, and even startling, will exhibit relationships with others previously known, though not till then in all their bearings. It were strange, therefore, if men and their works, essentially natural as they are, did not illustrate the same principle of mutual relation and interchange. We are constantly learning that they do so, and however we may map out our life-work by social limitations, as doubtless we must for the sake of mere efficiency, there will always be borderlands where its provinces merge within each other and claim a common interest. The scope of such a borderland is sketched with simplicity, clearness, and moderation by the Rev. C. G. K. Gillespie, in a brief paper which discusses the Claims of Sanitary Science upon the Clergy. The author's intention is to show that the principles of elementary sanitation lie almost as much within the sphere of clerical duty as of medicine or sanitation. Matters of household hygiene may thus be regarded as common property, and a due appreciation of their importance would doubtless go far to maintain the just influence of parish clergy. In advocating the addition of a course of instruction in the outlines of sanitary science to the plan of clerical study the author (who is himself a certified inspector) is conscious of some interest in a field inseparable from that of morals, while duly conserving the stronger claims of medical neighbours.

ACROMEGALY.

M. GABRIEL GAUTHIER records the details of the post-mortem examination of a case of acromegaly in the current number of *Le Progrès Médical*, the clinical facts of the case having been published in the same journal two years ago. The patient died, "like most acromegalics," from marasmus and syncope, and during the last month of his life he had some attacks of pseudo-erysipelas on the forehead, nose, and cheeks. The post-mortem examination showed thickening of the cranium at the occipital protuberance, but not elsewhere. The vessels of the pia mater were voluminous and engorged, and in removing the brain from the cranial cavity it was found that the pituitary body was replaced by a tumour the size of two thumbs, filling the sella turcica and overlapping it. The tumour was nearly spherical, and was enclosed in a special envelope of dura mater, tense and thinned. On incising this, some pulpy material escaped, the whole mass weighing thirteen grammes. Microscopically, no other elements than those of cerebral tissue could be found in it. The optic and ocular nerves in contact with the tumour were unaltered, the circular and cavernous sinuses were especially compressed, whilst the coronary sinus was hardly to be seen. The pituitary fossa was considerably enlarged and the clinoid processes partly destroyed, whilst the shell of bone over the sphenoidal sinuses was very thin. There was no lesion of the brain itself, or of its nerves, or of the sympathetic. The thyroid body was normal. As to the viscera, there was some degeneration of the myocardium, and the valves of the heart were normal, but the orifices large; the kidneys were large and soft; the liver, spleen, and lungs normal. It was impossible to examine the whole skeleton, but the observation of the condition of the fingers noted during life was verified by dissection, the phalangeal joints of the left ring finger showing marked changes, such as wasting of the articular ends of the phalanges and ankylosis of the terminal and middle phalanges.

DRUNKENNESS AND CRIME.

THE *Daily News* of the 18th inst. gives the chief details of the new Government Bill for the suppression of drunkenness in Germany, of which we have already given some particulars. Amongst other provisions, publicans will not be allowed to turn drunken persons out of their houses without providing for their safe conduct home, the expenses to be paid by the drinkers. The Bill provides for the appointment of guardians to habitual drunkards. The measure is likely to be much opposed. But it is a Government Bill, and the Emperor's interest in it will count for much in the attention it will receive. Sir Lyon Playfair has induced Sir Henry James to try to define the bearing of the element of drunkenness in criminality. Even Sir Henry James has found it difficult to do so. The following is a summary of his conclusions:—

"In determining the legal character of the offence committed, drunkenness may be taken into account—1. Where it has established a condition of positive and well-defined insanity. 2. If it produces a sudden outbreak of passion occasioning the commission of crime under circumstances which, in the case of a sober person, would reduce the offence of murder to manslaughter. 3. In the case of minor assaults and acts of violence it never can form any legal answer to the charge preferred, but it may either aggravate or mitigate the character of the act committed—probably the former. 4. As to the effect that should be given to drunkenness when determining the amount of punishment to be inflicted, no general rule can be laid down. Its existence may be considered, and may tend either in the direction of increasing or diminishing the punishment imposed. This is all the help I can give you. I am afraid I have done but little to solve the problem you have placed before me."

One thing seems clear in the tendency of civilisation, that drunkenness itself should be made more definitely an offence than we have been accustomed to regard it.

PLASTIC BRONCHITIS.

DR. JÓZEFOWICZ describes in the *Gazeta Lekarska* an interesting case of that somewhat rare disease, plastic bronchitis, occurring during the course of acute articular rheumatism. The patient was a student, nineteen years of age, who complained of a troublesome cough with lancinating pains in the chest. The expectoration was muco-purulent, and contained some blood and fibrin. In the course of the disease one night a sudden paroxysm of cough occurred, with copious bleeding from mouth and nose, and expectoration

of flesh-like masses. Dr. Józefowicz, on examining the expectoration, found in it masses of coagulated fibrin, partly presenting ramifications, as if coming from the smallest bronchi, and partly cylindrical, corresponding with the shape of the larger bronchi. Shreds of membrane of various thickness were also found, probably coming from the largest bronchi, or possibly from the larynx and nose. The microscope also discovered numerous pus-corpuscles, epithelial cells, and red blood-corpuscles. The etiology of plastic bronchitis is not sufficiently known. Phthisis, bronchial catarrh, general debility, atmospheric influences, diphtheria, and typhoid fever are mentioned as causes of the disease, and it is also found associated with mitral insufficiency or stenosis of the auriculo-ventricular orifice. This connexion existed in the present case, as, even during an early period of the rheumatic affection, both these heart symptoms were diagnosed. Another symptom to be taken into serious account was the infiltration of the lung parenchyma, which could not be referred to an existing fibrinous pneumonia. Probably it was due to an exudation of blood, or possibly of fibrin, into the pulmonary vesicles. Hæmoptysis is generally insignificant and very rarely profuse.

THE EPIDEMIC AND THE DEMAND FOR NURSES.

IT is inevitable that one of the natural consequences arising out of a widespread and serious epidemic should be the extraordinary demand which it creates for the services of all whose part it is to attend upon the sick. Our readers are familiar with the numerous proofs of such a dearth afforded by experience of the present visitation of influenza, especially as regards the provision of trained nurses. The valuable assistance rendered to the sick by these latter was never probably so fully recognised as now, nor its absence in urgent need so deeply felt. Happily, however, we are not quite without resource in the circumstances. We cannot, indeed, fall back upon any reserve establishment. It were well if we could, and the lesson of prudence in this matter taught by the present nursing difficulties will not, we hope, be forgotten. Meanwhile there is much to be said for the proposal to create a temporary central bureau which would arrange with friends of the sick for the ready transfer of nurses wherever available. We must also look to medical men for some help in the present emergency. The needs of all sufferers are not equally great. The care of some who may prefer a trained nurse, though not seriously ill, may very fairly be entrusted to judicious relatives. Others will find the attendance of careful and sensible persons acting under the guidance of practitioners, though not specially skilled, quite equal to all their needs. In either case the nursing capacity of men and women more perfectly trained for service in the sick room would be freed for duties of greater responsibility. It is for the practitioner to use his influence with due discrimination in seeking to secure this result. We should remember, too, that such irregular aid as we have mentioned is often very far from inefficient. It was upon this that our progenitors relied, and not in vain, since qualities like obedience, kindness, and good sense prove of great value in nursing, even without technical instruction. Supervision on the part of the medical man in charge will make up for some deficiency in the latter desideratum.

BACK-TO-BACK HOUSES.

THE question of back-to-back houses continues to be one of discussion in several of our northern towns where this method of house construction has been carried out. From a few persons it receives support. Dr. J. H. Bell of Bradford has, in a communication to the Yorkshire branch of the Society of Medical Officers of Health, brought forward certain statistics to show that by comparison of certain areas in that borough the general rate of mortality was small in continuous rows of back-to-back houses, and distinctly higher in "through houses." What the explanation of this circumstance in the three localities chosen was we do not profess to know; but we are quite certain that the absence of means of through ventilation in the one set of dwellings and the facilities afforded for through ventilation in the other did not cause the difference referred to. And it is equally certain that no one of any intelligence has assumed that the rate of mortality in dwellings is governed by this one consideration of through ventilation only. The age and character of the population inhabiting such areas may have a most important effect in determining the amount of death; the question of soil and wholesomeness generally of sits and buildings may also have some effect; but one thing is sure—namely, that given dwellings and a population in every respect alike, except as regards the question of the through ventilation of the houses, those dwellings which have such means of ventilation will unquestionably be found more healthy than those lacking it. A very different view of the subject to that suggested by Dr. Bell was taken by his audience, both at the recent gathering at Hull and at the Leeds conference in October last. Indeed, at the latter it was decided to express to the Local Government Board the decision of the Society, to the effect that back-to-back houses, which do not admit of through ventilation from opposite sides, are essentially insanitary, and have been proved by experience to be prejudicial to the health of their occupants; that every effort should be made to convert them into "through houses"; and that their erection in the future should be prohibited. They further petitioned the Board to obtain an Act of Parliament embodying this prohibition, fixing a minimum width of front and back streets, and requiring for every new house a separate back yard and closet. The latter is a provision of the utmost importance; indeed, the absence of decency and privacy in connexion with the closet accommodation of back-to-back houses is one of the gravest defects attaching to that highly objectionable method of house construction.

FOREIGN UNIVERSITY INTELLIGENCE.

Bologna.—Dr. Maiocchi of Parma has been appointed to the chair of Dermatology and Syphilography.

Heidelberg.—Dr. Knauff has been promoted to the Professorship of Forensic Medicine and Hygiene.

Kiel.—Drs. Kosegarten and von Starck have been recognised as *privat-docenten* of Otology and Medicine respectively.

DEATHS OF EMINENT FOREIGN MEDICAL MEN.

THE deaths of the following distinguished members of the medical profession abroad have been announced:—Dr. E. Lipp, Professor of Dermatology in the University of Gratz.—Dr. L. de la Pascua, formerly Professor of Hygiene in Mexico.

THE Belgian Society of Gynæcology and Obstetrics is about to institute an International Congress for the discussion of questions cognate to the above subjects. The first meeting will be held at Brussels in September next, from the 14th to the 19th, and will concern itself with the following topics: Pelvic suppuration, extra-uterine fœtation, and placenta prævia. The meetings will be held every fourth year, and will take place alternately in Switzerland and Belgium. Communications to be addressed to the general secretary, Dr. Jacobs, 12, Rue des Petits-Carmes, Brussels.

MR. A. H. WILSON, L.R.C.P.Lond., has been selected as chief medical officer to the General Post Office, vice Mr. G. C. Steet, F.R.C.S., retired.

WE regret to record the death of Surgeon-General G. M. Slaughter at Alderen Manor, Sandhurst, on the 9th inst. The late surgeon-general was the principal medical officer at Portsmouth at the time of his comparatively recent retirement from the service, and was sixty years of age at the time of his death. He joined the army in December, 1865, and passed through the several ranks of the department, being promoted to that of surgeon-general in January, 1890. He served with the 7th Hussars in the Indian campaign from February, 1858, to March, 1859, and was present at all the principal engagements, including the siege and capture of Lucknow. The late surgeon-general was a very industrious and conscientious officer, and an able and popular administrator, and his death so soon after his retirement will be much regretted by the officers of the medical staff.

A CORRESPONDENT draws our attention to the monthly official Portsmouth and Southern District Directory for the month of January, edited by the Deputy Assistant Adjutant-General, in which he considers a somewhat invidious distinction is made in the use of the compound titles of the Army Medical Staff and those of the veterinary surgeons. The medical officers are described by the compound titles, whilst under the heading "Army Veterinary Department" is the following entry: "Veterinary Officer—Major ——." The distinction thus made has been construed in some quarters as an instance in which the military element is intentionally denied to the medical staff in contrast to the Veterinary Department. May not the printer be responsible for the discrepancy?

AT the Medical Society of London, on Monday last, before the commencement of the second Lettsomian lecture, the President alluded in feeling terms to the death of the Duke of Clarence and Avondale. Sir Joseph Fayrer proposed that a vote of condolence and sympathy should be forwarded to the Prince and Princess of Wales, and this was seconded by Professor Wm. Rose, and carried *nem. con.* This vote of the oldest medical society is a fitting expression by the members of the profession of a feeling that we are sure is shared by every practitioner of medicine, and to which we ventured to anticipate at the earliest possible opportunity in our leading article of last week.

IN a paragraph in THE LANCET of last week (page 159) we stated that Sir Andrew Clark will resume his instructions in Clinical Medicine at the London Hospital on Jan. 19th at 2 o'clock. We understand that this announcement was not quite correct. The instructions will be given on Tuesdays at 3 P.M., commencing with Tuesday next, the 26th inst.

THERE will be a debate on Phagocytosis at the Pathological Society of London on February 16th. Members and others wishing to take part in it are requested to give notice to Dr. Charlewood Turner, the medical secretary.

YELLOW FEVER IN BRAZILIAN PORTS.—The Cunard mail steamer *Bothnia*, which arrived at Queenstown on the 19th inst. from New York, brings intelligence of the arrival at that port of the Liverpool steamers *Plato* and *Ptolemy* from Rio Janeiro, *viâ* St. Lucia. While at the former port several of the crews of both vessels were stricken with yellow fever, and while on the passage to New York the chief steward of the *Ptolemy* and a fireman of the *Plato* died of yellow fever and were buried at sea.

THE RUSSIAN FAMINE.

ANALYSIS OF THE BREAD IN USE.

AN unparalleled disaster has befallen a great people. A famine is laying waste fifteen to eighteen provinces of the Russian empire. Each of these provinces is as large as England, though, fortunately, not so densely populated. This disaster cannot be compared even with the Irish famine of 1846, for the present Russian famine affects a much larger population and its consequences will be more far-reaching. Indeed, this famine is a stupendous event. It is impossible to exaggerate its importance, whether we look upon it only from our own restricted point of view—namely, as affecting the public health,—or whether it be considered in its political and economical bearings. Official statistics give us some idea of the magnitude of the disaster; and it is most essential, in dealing with this question, to thoroughly understand that this is no mere local trouble, but that whole nations, as it were, are being struck down; for a Russian province is large enough to make a nation in itself. According to these statistics, we find that the wheat sown in autumn gave, in sixty Russian provinces, from the years 1883 to 1887, an average yield of 26,000,000 hectolitres. The present year the yield has been equal to 25,000,000 hectolitres; but when we come to the wheat sown in the spring we find that instead of an average harvest of 63,000,000 hectolitres there were only 38,000,000 hectolitres gathered. So far as the food of the great mass of the people is concerned, the rye crop is of much more importance. The average yield of rye for the sixty provinces is 249,000,000 hectolitres; this year only 190,000,000 hectolitres were gathered in. For oats there were 169,000,000, instead of 195,000,000, hectolitres. The aggregate of all crops was 517,000,000 hectolitres, instead of 645,000,000, thus showing a deficit of 128,000,000 hectolitres.

To the Western European this may not seem an insurmountable disaster. In France the harvest of 1879 yielded only 209,000,000 hectolitres, instead of 260,000,000. Roughly speaking, the proportion in both cases is the same—there was a falling off in the harvest of one-fifth; yet there was no famine whatsoever in France, while in Russia thousands are now dying for want of food. But in France there was money enough to import from abroad sufficient corn to make up the deficiency, and there were railways and roads by which this imported corn could be conveyed to the districts where it was wanted. Then, again, if the deficit were spread all over Russia the evil would not be so great; but it is concentrated, and, out of a population of about 100,000,000, affects some 27,000,000. The average production of corn of the famine-stricken districts is equal to 240,000,000 hectolitres, or 37 per cent. of the whole Russian harvests. The harvest in 1891 was of 141,000,000 hectolitres, or 45 per cent., less than the average harvest. Then if we consider individual provinces the disaster becomes still more apparent. Thus in Voronej the harvest amounted to 28,000,000 hectolitres in 1888; to 13,000,000 hectolitres in 1889, to 31,000,000 in 1890, and to less than 4,000,000 in 1891. To import from abroad the 128,000,000 hectolitres of grain would cost, it is said, £60,000,000, and require about 6400 ships. The people of France actually spent about this sum from 1879 to 1880 so as to purchase the 86,000,000 hectolitres of wheat and flour which they needed to make up for their bad harvests; but then in France there are 64 kilometres of railway lines to every 1000 kilometres square of land, while in Russia there are but 5 kilometres of railway to the same amount of land. Thus it is extremely difficult—in some cases absolutely impossible—to convey relief to the distressed districts. Also this relief must be given—it cannot be sold; for there is a money famine as well as a rye famine. Since 1879 Russia has exported annually some 100,000,000 hectolitres of grain, for which it has received about 300,000,000 roubles. But exports have been prohibited, and this, though done somewhat late in the day, will reduce the flow of foreign money into Russia to the extent of some 200,000,000 roubles.

As in Russia private initiative is not tolerated, and societies formed for the purpose of relieving the victims of

the famine are declared to be illegal, we can only look to the Government to cope with the famine. But the Government so far has not devoted to this purpose as many paper roubles as there are pounds sterling required. Indeed, the Government itself is in sore difficulties. As one instance, we may mention that in 1890 some 4,000,000 hectolitres of grain were used for distilling purposes, and the tax on the alcohol thus made amounted to 270,000,000 roubles. But this prolific source of income is now checked. It is difficult to obtain the grain to distil, and the prevailing poverty naturally reduces the consumption of alcohol. Such briefly and in broad lines are the main features of the present famine.

Perhaps, in this long story of woe, what has most shocked the English public is the account of the cruel, heartless frauds practised by those who have adulterated the flour bought for the relief of the famine. Anything seems good enough for a Russian peasant to eat; and not only is adulteration practised in a wholesale, but also in a most unintelligible, manner. We have had sent to us a specimen of bread from the famine district of Nijni-Novgorod. According to our information this sample is a good illustration of the extraordinary submissiveness and the contented disposition of the Russian moudjic. Hearing that there were friends in England who wanted to see some of their bread, these people made it a matter of pride to send as good a specimen as possible. Perhaps they thought their English friends meant to eat it, but any other person excepting a Russian would, under the circumstances, have sent the worst and not the best sample. Also it should be noted that this bread was made at the end of the month of November, and by this time the distress must be much more acute. Consequently it can only be looked upon as exceptionally good, rather than particularly bad bread; yet many persons to whom we showed the sample failed to recognise that it was bread at all. It is dirty-brown in colour, and looks like coarse peat. It was evidently rye bread, and as such could not be otherwise than dark in colour. On fracture a slightly earthy and sour smell was observed, but with the features which characterise rye meal. Coarse particles of husk, leaves, and small seeds could be seen with an ordinary lens. An analysis of the bread gave the following results expressed in parts per cent.

ANALYSIS OF RUSSIAN BREAD.

		Per cent.
Moisture		22·22
Organic matters—		
Starch	35·33	
Sugar, gum, &c.	10·01	
Nitrogenous substances	14·81	
Woody fibre	10·40	
Fat	1·60	
		72·15
Mineral matters—		
Silica, sand, &c.	2·50	
Alkaline carbonate, with small quantity of phosphate and chloride	2·00	
Lime salts (phosphate)	1·13	
		5·63
		100·00

To admit of easy comparison the following published analyses of rye flour, well prepared rye bread, and wheaten bread are appended. In order that the analyses may be fairly contrasted, the results are calculated (except in the case of rye flour) on the assumption that the moisture is the same as that contained in the Russian sample—viz., 22·22 per cent.

ANALYSIS OF RYE FLOUR.

		Per cent.
Moisture		14·24
Organic matters—		
Starch	58·73	
Sugar, gum, &c.	11·01	
Nitrogenous substances	10·97	
Woody fibre	1·62	
Fat	1·95	
		84·28
Mineral matters—		
Alkaline phosphate	1·20	
Lime and magnesium phosphates	0·28	
		1·48
		100·00

ANALYSIS OF RYE BREAD.

		Per cent.
Moisture		22·22
Organic matters—		
Starch	63·00	
Sugar, gum, &c.	3·54	
Nitrogenous substances	8·40	
Woody fibre	0·40	
Fat	0·61	
		75·95
Mineral matters—		
Alkaline phosphate	1·50	
Lime and magnesium phosphates	0·33	
		1·83
		100·00

ANALYSIS OF WHEATEN BREAD.

		Per cent.
Moisture		22·22
Organic matters—		
Starch	63·44	
Sugar, gum, &c.	3·00	
Nitrogenous substances	8·42	
Woody fibre	0·50	
Fat	1·00	
		76·36
Mineral matters—		
Phosphates of potassium, magnesium, and lime		1·42
		100·00

These analyses show that the main differences existing between the Russian sample and the samples of rye flour and good rye bread in the kind and amount of its constituents are as follows:—

Starch.—The amount of this carbo-hydrate in the Russian bread is evidently very low—in truth, nearly 30 per cent. less than that contained in good rye or wheaten bread. Considering the fact that the carbo-hydrates, including starch, contribute largely by their capacity for rapid metabolism to the production of heat and mechanical work, and also that their use greatly favours an increase in the body, and especially of albumen and fat, the food value of the bread in this respect is seriously affected and materially reduced.

Now turning to the *Sugars, Gum, &c.*, it will be seen that these substances, which include the non-nitrogenous principles soluble in cold water, are present in larger proportion than in rye bread, although they do not exceed what we find in the rye flour. The poverty in starch is therefore partly, but by no means fully, compensated.

It must also be acknowledged that the *nitrogenous matter* in this sample of Russian bread is certainly high; but due regard must be paid to the fact that the leaves and woody tissue which, as will be seen, are present may probably not only introduce some nitrogen, but this in an indigestible form. This brings us to the strange and unjustifiable presence of woody fibre, husk, &c., which occurs to a very large extent. The proportion of this adulteration as compared with good rye reaches the very high figure of 10 per cent. It possesses no food value whatever. Worse still, it is not only itself incapable of digestion by man, but it hinders the digestion of the other constituents associated with it. It is well known that hard ligneous substances, such as the bran of black and brown bread, provoke by mechanical irritation active intestinal peristalsis. Moreover, the addition of cellulose or woody tissue to a meat diet is known to cause an imperfect assimilation of whatever meat may be consumed at the same time. On incineration of the separated fibre a strong smell, very like that produced in an ordinary bonfire or when garden refuse is burned, was evolved. The microscope showed fragments of plant leaves, with husk as well as mineral particles, and small seeds resembling rape. All these substances are of course foreign to genuine bread.

In respect to the *fat*, this item includes also colouring matter. The residue from the ether used in the extraction was of a bright green colour, probably derived from the chlorophyll in the leaves of some plant with which the bread is apparently admixed.

No less than 5·63 per cent. of the Russian bread consists of *mineral matter*, of which nearly one-half is silica and sand, about one-third alkaline carbonate (derived no doubt

from the woody matter), and not more than one-fifth valuable phosphatic constituents. The total mineral matter of genuine bread seldom exceeds 1·5 per cent., or 1·8 per cent. at most, while it never contains carbonate. Bread containing as much mineral matter as that in the Russian specimen would be regarded in England as grossly adulterated, and legal proceedings would be immediately and, it might be added, successfully taken in accordance with the requirements of the Food and Drugs Adulteration Act. The husk and leaves in the bread would account for this abnormal result.

Our examination indicates, in short, the addition in round figures of not less, and probably more, than ten pounds of foreign substances to every hundredweight of rye flour. The foreign substances would appear to consist of certain leafy matter and seeds, including woody fibre and husk.

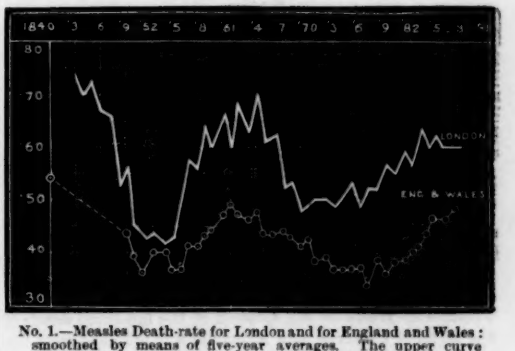
Thus, to make the flour a little heavier, and to increase its volume, we have foreign matter, husk, leaves, &c., which are not only of no use in themselves, but destroy a portion of the nutritive value of what remains. How much better would it have been to have had in bulk 10 per cent. less bread. A Russian, writing from the same province from which the sample of bread we have analysed was obtained, speaks of much worse specimens than this. He says: "I found in many cases that this so-called bread contained no rye-flour whatever, but was composed of revega (wild arrock), potatoes, chaff, and leaves." Then he adds the terribly significant announcement that "within two versts of my house there are more than 130 cases of typhus. Hunger and cold in their severest forms are daily gaining ground, and pestilence even now is devastating the districts." The Government relief, where it is given, only amounts to 30 lb. of rye-meal per head per month, excluding from each family the father and two of the children, who, according to the Government theory, ought to be able to keep themselves. Most of the cattle has been sold, and this for derisive sums. It will be almost impossible to carry on agricultural operations as in the past. If the weather this year favours a good harvest, there will nevertheless be a renewal of the famine next winter; for, in many cases, it is impossible to procure seed for sowing. For instance, from Volskaya, near Suratoff, we hear there are 280 cultivators, and that not ten among them will have seed. The best of weather, therefore, will fail to produce a good harvest at Volskaya, and there are any number of other places in a similar predicament. We sincerely trust there will be a good harvest this summer, but we fear it will not prevent a renewal of the distress next winter. Doubtless next year's famine will not afflict so many provinces; but the people, so sorely tried now, will be less able to support it. Therefore, in looking upon this question, it is unhappily necessary to make provision for the long continuance of the present suffering. That it will engender plague and pestilence in Russia is but too likely, and it is a question whether these terrible evils may not travel farther, and Russia become a centre of contagion that will spread to other parts of Europe, or perhaps of Asia.

Not the least distressing among all these sad facts is our inability to efficaciously help in this moment of sore distress. We are convinced that the English people would take especial pleasure in showing that no political consideration could in any way lessen their feeling of intense sympathy for the suffering of the Russian people. Unfortunately the oft-demonstrated venality of Russian officials has prevented the sending of subscriptions to the Russian Government; while, on the other hand, the Russian authorities will not allow private charitable organisations to take the matter in hand. Consequently no general appeal has been made, though so many feel that it is the duty of all Europe to come to the rescue of Russia in her present trouble. The Russian Government assumes a heavy responsibility in checking all spontaneous efforts at assistance. It is in the same position as the Spanish Government during the great cholera epidemic of 1885. The Spanish Government officials were not trusted, and little or no money was placed in the hands of the Spanish Government for the relief of the distress. But charitable organisations were formed in Spain by private enterprise, and these commanded the confidence of all. They were the means of relieving much distress, and received liberal support. Nothing of the sort is possible under the Russian autocracy. Thus the few subscriptions which, in spite of these unpromising circumstances, can be collected in England, must be sent, not to a large representative and responsible society, but to individuals, such as Count Tolstoï, or to such Protestant and other clergymen as may be known in England, or to some individual county council or zemstov which the subscriber has special reason to trust. All this is most deplorable, as otherwise it would have been possible to render efficacious relief. In America and in France large sums could be obtained. The Germans have already offered help, and therefore we may most assuredly conclude that many thousand lives could be saved by assistance from England and other countries. This would have lessened the danger of epidemics that may not be confined to Russia, and would have done much to soften the antagonisms which unfortunately exist between different countries, and which we must all deplore.

ON VARIATIONS IN THE DEATH-RATE OF MEASLES.

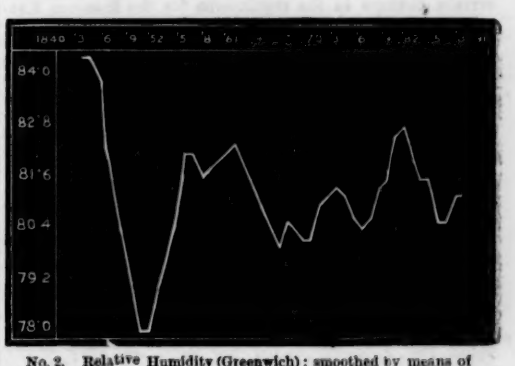
BY ALEX. B. MACDOWALL.

IF we take the annual death-rates of measles in London since 1841, and smooth the values by means of five-year-averages, we get the upper curve in the accompanying chart (No. 1). Dealing similarly with the measles death-



No. 1.—Measles Death-rate for London and for England and Wales: smoothed by means of five-year averages. The upper curve refers to London: the lower curve to England and Wales.

rate for England and Wales, we get the second curve. (This series begins in 1838, but there is an interruption from 1843 to 1846.) It will be understood that each year-point represents an average of five years. These curves reveal a curious fluctuation in the death-rate. At



No. 2. Relative Humidity (Greenwich): smoothed by means of five-year averages.

about twenty years' interval, in the case of London (say, in 1843, 1864, and 1883), maxima seem to have been reached, while minima appear in 1853 and 1869. The curve for England and Wales also presents long waves, with

apparently somewhat longer intervals between the maxima, one of which was in 1861. We appear to have been lately near the crest of one of those waves, and might perhaps expect the curve now to go down, on the whole, for some years.

Unfortunately we cannot go further back than the dates indicated for exact data regarding the death-rate, but it might be well to study, on the one hand, the relative prevalence of measles in the years previous to 1840 for indications of like intervals, and to watch the future course of the curves in the light of what they indicate during those fifty years.

The third curve (second chart) is one of humidity. The annual figures denoting relative humidity at Greenwich are smoothed in the same way as the death-rates. A certain degree of correspondence to the upper curves will be noted. The phases of the London death-rate curve appear, however, to lag somewhat behind those of the humidity curve, as might, perhaps, be expected from the relationship between these two phenomena.

For the sake of comparison I append a few figures, showing the London measles death-rate in two groups of five years, each having a maximum year central, and in two groups, each having a minimum year central.

DEATH-RATES.

	Maximum.					Average.
1864	0·82 ..	0·56 ..	0·94 ..	0·43 ..	0·73	0·70
1883	0·66 ...	0·60 ..	0·62 ..	0·56 ..	0·71	0·63
	Minimum.					**Average.**
1853	0·55 ..	0·25 ..	0·40 ..	0·56 ..	0·35	0·42
1869	0·37 ..	0·62 ..	0·46 ..	0·45 ..	0·44	0·47

UNIVERSITY OF LONDON.

MEETING OF CONVOCATION.

AT the meeting of Convocation of the University of London on the 19th inst. the chair was taken by Mr. E. H. Bush, in the absence through illness of the Chairman of Convocation, Dr. Wood.

A vote of condolence to the Queen and the Prince and Princess of Wales on the occasion of the lamented death of the Duke of Clarence and Avondale was proposed from the chair and unanimously passed.

Dr. W. J. COLLINS, M.D., presented the report of the Annual Committee, and moved its reception. This having been agreed to, Dr. Collins moved the adoption of the following motion (*a*) recommended in Paragraph 8 of the report of the Annual Committee: "That, having regard to certain changes in the regulations for the Honours Examination in Chemistry at the B.Sc. Examination, whereby the production of the student's MS. book of laboratory work is required, signed by the teacher, if any, whose course he has attended as evidence of work done under the teacher's direction and supervision, this House is of opinion that such regulation imports into examinations considerations which should be excluded, and is liable to place at a disadvantage the non-collegiate candidates."

Dr. O'REILLY, D.Sc., seconded the motion.

Dr. TILDEN, D.Sc., moved, and Dr. CURNOW, M.D., seconded, an amendment to the effect that Clause 8 of the report should be referred back to the committee for further consideration. After some discussion the amendment was declared to be lost, and Dr. Collins's motion was subsequently carried.

Dr. T. B. NAPIER, LL.D., moved:—"(1) That this House, while not expressing any opinion as to the proposed new Charter for the Albert University generally, yet considers that the absence of any sufficient provision in the Charter for securing a fixed period and definite course of study by candidates for its degrees is likely to prove injurious both to the interests of higher education and of this University; (2) that the annual committee be requested to take such steps as in their opinion may be desirable to obtain a modification of the Charter in this direction; (3) that the annual committee be further requested to represent the views and guard the interests of Convocation generally in all matters connected with the proposed charter, and that for this purpose they be empowered to confer and to take joint action with the Senate, and to act otherwise as may seem expedient." He said that many objected to the proposed Charter of the Albert University as creating a university one-half of which was likely to be of a denominational character. It was opposed to the interests of higher education and also to the interests of their own University. There was no need for another examining University of London. Many might think the matter was really so serious that the Senate should have taken steps against such a Charter, or at least ask that the whole matter should be referred back to the Royal Commission. He was perfectly certain that Convocation had always looked, and would always look, to the Senate to guard its interests, and it was only when Convocation found the Senate listening to every voice, when it found it yielding all the privileges which had made that University such a success as it was at present, that it said it would go no further. He was sure Convocation would unite with the Senate to prevent that obnoxious Charter from becoming law.

Dr. O'REILLY seconded the resolution.

Dr. COLLINS moved as an amendment to Clauses 1 and 2 of the resolution, "That this House is of opinion that the Albert University Charter, if granted, would neither supply a Teaching University for London, as recommended by the Royal Commission, nor tend to promote the interests of higher education, while it might interfere with the work of the University of London. That the chairman be asked to convey a copy of this resolution to Sir John Lubbock, M.P., with the request that he will bring it to the notice of Parliament."

Mr. BUSK seconded the amendment, which was accepted by Dr. Napier in the place of his own motion, and carried as a substantive motion. Clause 3 of the resolution was also carried.

TUBERCULOSIS.

THE Medico-Chirurgical Society of Glasgow have, in pursuance of a resolution passed at a meeting of the Society on Dec. 18th, 1891, addressed a memorial to the Lord Provost, Magistrates, and Town Council of Glasgow in respect to the infectious character of tuberculosis and the need for prophylactic measures.

The following is the main text of the memorial:—

"1. Tuberculosis is an infectious disease in the sense that in all cases of this disease the one constant and necessary element in the causation is a microbe. This microbe grows and multiplies in the bodies of certain animals and of man when introduced from without, and in so doing it produces an intensely active poison which is the more direct agent in bringing about the morbid changes in the living structures. There are doubtless other elements in the causation, such as inherited and acquired susceptibility, but the microbe is the only essential and constant one, and there is evidence to show that, without any special susceptibility, it may produce the disease if introduced in sufficient quantity.

"2. As the microbe will not grow except at a temperature almost identical with that of the body, the living bodies of men and animals affected are the great propagating places of it. They are the sources of the supply, and constitute the centres from which the infection is derived. But the microbe is not retained in the bodies of the persons affected. Most of the forms of tuberculosis are characterised by discharges of matter from the affected parts of the body, and these discharges contain the microbe—often in very large quantities. The most frequent form of tuberculosis is consumption of the lungs, and persons affected with this disease almost constantly spit up matter which is loaded with the infective microbe. The sputum of such persons when dry is liable to be pulverised into fine dust, and this in its dissemination carries the still living microbe with it.

"3. It is believed that tuberculosis is fairly to be compared, as regards its infectious quality, if not with typhus and small-pox at least with typhoid or enteric fever, although the mode and channel of the infection may be so different

as to make it much less obviously dangerous to live in the same house or room with a case of consumption than it would be in the case of one of the well-known contagious fevers. Tuberculosis, however, is much more disastrous in its results than all the other infectious diseases put together. According to the annual report of the Registrar-General for 1888, the deaths registered as due to tuberculosis in Glasgow numbered 1824, and those assigned to all other miasmatic—that is, infectious—diseases, including measles, scarlet fever, whooping-cough, &c., were 1089. For reasons know to us, it seems certain that the mortality from tuberculosis considerably exceeds that which appears in the Registrar-General's returns, but even these figures are sufficiently striking. The deaths registered as tuberculous made up 15·5 per cent. of the total deaths in Glasgow in 1888. These facts imply a large amount of what may be called 'floating infection' in our midst.

"4. The Town Council by its action in prohibiting the sale of tuberculous meat and milk has, in our opinion very properly, endeavoured to grapple with one source of the infection. It may be said that the great prevalence of tuberculosis in cattle, especially in milk cows kept in town byres, and therefore both more likely to be infected with tuberculosis and to become in turn sources of infection through their milk, has justly been already considered by the authorities. We recognise the wisdom of a policy having for its object the removal of this source of infection, which is dangerous for man as well as for animals. It should be possible by rigid cleansing and disinfecting of byres, and by the condemnation of all carcases or animals known to be tuberculous, to stop this source of infection.

"5. It is not for us to prescribe the mode in which the infection should be dealt with in the case of man. The Council has skilled officials whom it can consult on the matter. But we venture to suggest that a beginning should be made with a definite attempt to stay the infection. If the public were authoritatively informed of the harmful nature of all discharges from tuberculous persons, and more particularly from cases of consumption of the lungs, and if they were encouraged to have these discharges rendered innocuous, and also to submit their houses and clothing to disinfetcion at intervals during the currency of the disease, and again at its close, it is believed that much good would result. With the splendid sanitary organisation which Glasgow possesses, it should be possible to do much to cleanse our city from some of the principal causes of the widespread prevalence of this its greatest plague."

The document is signed on behalf of the society by

JOSEPH COATS, M.D., President.
W. T. GAIRDNER, M.D.
HUGH THOMSON, M.D.
JOHN LINDSAY STEVEN, M.D.
CHAS. WORKMAN, M.D.
J. WALKER DOWNIE, M.D., Secretary.

UNIVERSITY LIFE IN AUSTRALASIA.

IN the lecture delivered by Professor Anderson Stuart, M.D., Professor of Physiology in the University of Sydney, the other evening at the Royal Colonial Institute, there was much to interest the profession of medicine, but we shall content ourselves with emphasising one or two points that appear to us well worthy of notice. The universities of Australasia are teaching universities, each one having its staff of professors and other teachers, and in medicine there is no such thing as exemption from lectures. There are at the present moment altogether 141 teachers and 2049 students actively engaged in the work of the universities. The former are for the most part graduates of European universities. The duration of the curriculum in medicine has never been less than five years, and, in Sydney at least, physics, ophthalmic medicine and surgery, psychological medicine and logic, and the principles of science are necessary for the bachelor's degree. The standard of examination is a high one, and nowhere in Australasia is there anything like a "cheap" degree. Dr. Anderson Stuart speaks highly of the work of the students, and says that they "have a definite aim and take a serious view of life." In the University grounds is a general hospital, the Prince Alfred, which is the clinical school for the University. No difference is made between the sexes; there are no separate courses of instruction in Sydney, and no difficulty has made itself felt. The last third of the lecture is exclusively occupied with what appears to be the burning question of the day—viz., that of government. It appears that at present in all the four universities the body of graduates has, or soon may have, the entire management in their hands, inasmuch as they elect the governing body, which controls not only such matters as finance and appointments, but even actively busies itself with questions of internal administration, discipline, and purely educational matters, which it would do very much better to leave to the teachers, whose daily work is concerned with such things. It is proposed, it seems, in some quarters to get rid of the present representatives of the teachers, who sit on the governing body, so that then all the members of the governing body would receive their mandate directly from the graduates. The lecturer argued against the graduates being necessarily fit and proper persons to exercise this power, and spoke in favour of the adequate representation of all the interests concerned—viz: (1) The public, through the Government representatives, all the more since the greater part of the funds come from the State, which at present has no voice in their expenditure; (2) the educated public, through the graduates' representatives; (3) the teachers; (4) the body of students, as in Scotland; and (5) perhaps the affiliated colleges in Sydney and Melbourne. The first three certainly constitute great and important interests, which should be represented in the governing body. With regard to the other two the case is not so clear. The presence of purely business men in the governing body is strongly advocated, and, indeed, the above scheme is largely to that end, for it seems that only professional men at present have any chance of election. Of the expediency of business men being there to advise on the many important business questions that arise there can be no question. Lastly, the lecturer urged that the body of teachers should be more trusted in the actual work of teaching than they are; and he was right. It is very easy to govern too much; and if a governing body is constantly interfering in such matters nothing but mischief can result. The resignation of the Professor of Law and Dean of the Faculty of Law in Melbourne, of which we have just read, comes to give point to the lecturer's words. But still there is no place that is perfect, and, said the lecturer, "Taking it all in all then, so far as our immediate surroundings are concerned, one *may* be very happy in a Colonial University chair. People will certainly be very kindly disposed to one, the authorities will do their best for one according to their lights, and, in a word, here, as so often elsewhere, the place is very much what one makes it. *Es hallt aus dem Walde wieder, wie man hineinruft.*"

INFLUENZA.

THE mortality returns for the week ending Jan. 16th exhibit some curious departures from the usual comparative death-rates in the large towns, which may doubtless be taken as indicating the places where influenza and its concomitants are prevailing or otherwise. Thus in London the death-rate has risen to 40 per 1000, but this proportion is exceeded by Liverpool (42), Wolverhampton (48·1), Brighton (51·5), and Portsmouth (57·5). Four weeks ago the rates at the two last-named places were only 18·0 and 17·9 respectively. The lowest death-rate for the week is at Huddersfield (14·6) and Bradford (15·7).

The deaths directly attributed to influenza in the metropolis for the week amounted to 271, and in addition to these there were 63 cases in which influenza was noted as a secondary cause. The number of deaths from diseases of the respiratory organs was 1248, or 594 above the corrected average. It is noteworthy that in London the total mortality was 1193 above the average numbers in the corresponding weeks of the last ten years, and that the unusual circumstance of there being more deaths (3271) registered than births (2680) is recorded.

As regards the prevalence of the disease in this country, we regret not to be able to record any appreciable diminution in its extent, although in some districts it seems to be of a far milder type than in others, or than in the previous outbreak. The accounts from all quarters are much to the same effect—namely, that the disease is still very prevalent. Indeed, it is in marked contrast with the more rapid subsidence of outbreaks noted last year and two years ago that in some places it has persisted, almost undiminished, for the past month or six weeks. Newcastle and Aberdeen are instances of this, the latter city experiencing of late a somewhat serious extension. From Manchester we learn that "cases of influenza have been met with here and in the surrounding districts, but compared with last year's epidemic it is mild and far less prevalent; neither amongst the patients at the hospitals and dispensaries nor in private practice has it assumed anything like serious proportions. At present it has not affected our local mortality to any appreciable extent, and our death-rate has been below rather than above the average." It seems to be more severe at Liverpool, and it has broken out in the Isle of Man, but in mild form. At Carlisle it is very prevalent. In Yorkshire there is also much sickness; and cases continue to occur in Lincolnshire. There seems to be no appreciable abatement in Norfolk and Suffolk, Norwich and Bury being especially attacked. Similar reports come from Cambridgeshire, Northamptonshire, Hertfordshire, and Essex. At Leicester the type is mild; but Dr. Tomkins, the energetic medical officer, has issued a circular warning the public of a possible visitation, and giving directions for prompt resort to care and medical advice. At Worcester, Birmingham, Stafford, and other midland districts it is very prevalent. In London and the suburbs it continues unchecked, and the public services are being greatly incommoded, magistrates, police, postal servants, and members of the Fire Brigade being amongst the sufferers. Nor is there apparently any notable diminution in the Kentish towns and villages, especially in the Maidstone and Ashford districts; whilst Sussex and Hampshire (especially Portsmouth and Southampton) are still the seat of the disease. Further west, we hear of its continued prevalence in South Devon, and its outbreak in Somersetshire.

Abroad the epidemic, which had subsided somewhat at Marseilles, has again appeared in severe form; also at Lyons and Chalons. It is abating at Milan, but spreading in Rome. Germany is gradually getting free from it, but its seaports have suffered severely. In Silesia, however, it is very severe. It is about the same at Vienna and is extending in Roumania. In Denmark and Sweden, where it has been exceptionally severe, it is now declining.

DR. BACCELLI ON INFLUENZA.

ON Friday, the 15th inst., writes our Italian correspondent, the amphitheatre of the Santo Spirito Hospital in Rome was crowded by an audience of more than three hundred to hear Dr. Baccelli deliver a lecture on influenza. Besides his own students, there were present the *personnel* of the public sanitary service, medical officers of the army and navy, and many lady nurses, professional and non-professional. The lecture, which lasted an hour (from 11 A.M. till 12), was illustrated as to symptoms and diagnosis by a typical case, carried in on his bed from the wards. Among the salient points of the lecture were the following:—For the last two centuries influenza has appeared in epidemic form about once in every ten years, but in varying degrees of diffusion and severity, and presenting by no means the same features or running the same course. Concurrent cold and wet have in Italy been its favouring conditions, and where it has been milder in its incidence there has been a humid atmosphere, without cold, as in Rome; or a cold atmosphere, without humidity, as in the sub-alpine towns. Rome, indeed, has in the past enjoyed greater immunity from the severer forms of the disease than any other city of the same latitude, thanks to the stillness of her air, as well as to her bland, if moist, climate in winter. Even in this last visitation she has escaped more lightly than any other populous centre of the same size in Europe. The pathogenic microbe recently discovered is the same for all cases of influenza, but its favouring conditions are diverse, and among these must be noted the resisting power of the patient. During the epidemic of the last three years the catarrhal or rheumatoid forms of the disease have been less significant than the neurosal—this latter, indeed, constituting its true culminating character (*vero carattere culminante*). This neurosal character betrays itself not only in the usual points of least resistance—the respiratory and circulatory apparatus, as well as in the alimentary tract,—but throughout the whole system (*per tutto l'organismo*); and it is in subjects who have passed the meridian of life ("*il mezzo del cammin di nostra vita*"), whose breathing and blood-diffusing, as well as blood-forming, apparatus are enfeebled by time and use, that influenza finds its aptest prey. Having described some typical cases of influenza and reviewed the symptoms in the ascending scale of their severity, Dr. Baccelli took one in which there was bronchial distress concurrently with debilitated heart, and indicated the treatment to which the response was most satisfactory. Camphor, whether for its action on the nervous system or its microbicidal virtue, is of marked benefit at the first stage. The labouring heart, announced by the enfeebled, often faltering and irregular pulse, is reinforced by injections of oil of camphor every three or four hours, in doses of twenty-five centigrammes of camphor to one gramme of oil. When the gravity of the symptoms is still unrelieved, or when by previous use of the remedy the patient does not satisfactorily respond to it, the injection of ether often succeeds admirably. In other cases, when impending cardiac failure calls for it, the injection of strychnine, beginning with two milligrammes and ascending to six milligrammes in the twelve hours, will often tide over this crisis and gain precious time. In this direction the neutral sulphate of strychnine has succeeded where the ethereal tincture of castoreum has failed. To sustain the powers, wine (preferably white Capri or Rhenish) taken very hot, in small quantities and at frequent intervals, should be given, and manifest good has been derived from a few centigrammes of Kermes in combination with quinine and camphor. It is not only the mucous, but the gastro-intestinal, zone that may be affected by influenza. In the last epidemic we have had true gastro-enteric forms; and in these we must feel our way with caution. If the patient is young and strong, then there can be no hesitation in employing an emetic—ipecacuanha in small doses by preference. The nervous symptoms are really more formidable than the gastro-enteric. In the acoustic cavities of the head the mucous tract is equally affected, as in other passages; delirium often supervenes, and in these cases, particularly in advanced life, the closest attention must be paid to the heart. When the respiration is embarrassed, striking benefit is often derived from the inhalation of oxygen. This, supplementing the subcutaneous injection of strychnine, is an addition to therapeutics which does honour to the Roman school, where it has long been practised with signal success.

The lecture, of which the above abstract gives but a meagre impression, will, at the request of the students, be made *publici juris*.

CONGRESS OF INTERNAL MEDICINE.

THE programme of the Eleventh Annual German Congress of Internal Medicine, which assembles this year at Leipzig on April 20th, has just been issued. Professor Curschmann is the president, and the permanent secretary is Dr. Emil Pfeiffer of Wiesbaden. Two subjects for general discussion are announced—the one on "The Severe Anæmic Conditions," is to be opened by Dr. Biermer (Breslau) and Dr. Ehrlich (Berlin); the other, on "Chronic Inflammation of the Liver," opened by Dr. Rosenstein (Leyden) and Dr. Stadelmann (Dorpat). There is a long list of papers, which includes the following:—Dr. Emmerich (Munich), Causes of Immunity and Recovery from Infectious Diseases; Dr. Peiper (Greifswald), Uræmia; Dr. R. Binswanger (Krewzling), Results of Treatment by Suggestion; Dr. Goltz (Strassburg), Results of Excision of Large Portions of the Spinal Cord; Dr. Schott (Nauheim), Etio-

logy of Chronic Heart Disease; Dr. Fürbringer (Berlin), on so-called Hepatic Colic and Pseudo-calculi (Biliary); Dr. Minkowski (Strasburg), Diabetes Mellitus following Extirpation of Pancreas; Dr. Adamkiewicz (Cracow), Treatment of Carcinoma; Dr. Finkler (Bonn), the Varieties of Pneumonia; Dr. Israel (Berlin), Secondary Changes of Circulatory Organs in Renal Insufficiency; Dr. Landois (Greifswald), Therapeutic Value of Blood-Transfusion in Man; Dr. Rütimeyer (Basel), Bilharzia Disease; Dr. Grawitz (Greifswald), Hæmorrhagic Infarcts in the Lung; Dr. Klebs (Zurich), Recovery from Tuberculosis and Biology of Tubercle Bacilli; Drs. G. and F. Klemperer (Berlin and Strasburg), Researches on Causes of Immunity and Recovery, especially in Pneumonia; Dr. Buchner (Munich), Immunity against Infectious Diseases; Dr. von Ziemssen (Munich), Subcutaneous Transfusion of Blood; Dr. H. Leo (Bonn), Diabetes Mellitus; Dr. Schreiber (Königsberg), Disorders of the Renal Circulation. Other papers are promised by Drs. Gerhardt, Geppert, Wolft, Löffler, Stern, von Jaksch, and Vucetic. The local secretary of the Congress is Dr. Krehl, Leipzig, Thalstrasse, 31.

RAILWAY ACCIDENTS IN 1891.

THE report upon railway accidents recently issued from the Board of Trade shows that the casualties attending this industry have been happily both fewer and less serious in their consequences than has been the case on many previous occasions. Indeed, when the record of six months contains no single instance of a railway passenger killed in any accident due to the movement of trains, it is possible to take a very pleasing view of the degree of perfection to which the working of our railway system has been brought. Nor is it only in respect of the immunity from accident which the present return exhibits that matter of congratulation may be found. It is only less gratifying to discover from an examination of the record of accidents that the lesson of experience has been taken to heart, and that errors which have proved to be the fruitful sources of disaster are being one by one corrected. Thus it is eminently satisfactory to find in the present record much less evidence than has usually been forthcoming of the literally fatal effects of overwork and protracted hours of labour. The examiners very properly are careful to inquire into this point and systematically to report the result of their inquiries. But it does not appear that the accidents which have formed the subject matter of the inquiries dealt with in the Blue-book have been in any appreciable manner attributable to this cause. In one or two instances the inquiry on this head has elicited the fact that railway servants are still to some extent overworked, but the extent of this overwork has not been great, nor has it in any instance been a manifestly contributing cause of accident. It is therefore very evident that in this respect the expression of public opinion has had a most salutary effect, and it may be hoped that at no distant date the chronicler of railway annals will be able to report the practical removal of what was at one time the most serious grievance of railway men and the most formidable danger to the public to which the railway system had given rise.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN thirty-three of the largest English towns 6420 births and 6455 deaths were registered during the week ending Jan. 16th. The annual rate of mortality in these towns was equal to 33·0 per 1000, against 28·7 in the preceding week; in London the rate was as high as 40·0 per 1000, while it averaged 28·0 in the thirty-two provincial towns. The lowest rates in these towns last week were 14·6 in Huddersfield, 15·7 in Bradford, 17·1 in Leicester, and 19·2 in Halifax; the highest rates were 42·0 in Liverpool, 48·1 in Wolverhampton, 51·5 in Brighton, and 57·0 in Portsmouth. The 6455 deaths included 604 which were referred to the principal zymotic diseases, against 549 in the preceding week; of these 265 resulted from whooping-cough, 161 from measles, 53 from diarrhœa, 52 from "fever" (principally enteric), 43 from diphtheria, 29 from scarlet fever, and one from small-pox. No fatal case of any of these diseases was registered in Plymouth, in Huddersfield, or in Halifax; while they caused the highest rates in Bolton, Sunderland, Newcastle-upon-Tyne, and Swansea. The greatest mortality from measles occurred in Burnley, Liverpool, Gateshead, Derby, Swansea, Sunderland, and Newcastle-upon-Tyne; from scarlet fever in Swansea; from whooping-cough in West Ham, Wolverhampton, London, Swansea, Bolton, and Newcastle-upon-Tyne; from "fever" in Norwich, Salford, Derby, and Bolton; and from diarrhœa in Sunderland. The 43 deaths from diphtheria included 29 in London, 2 in Birkenhead, 2 in Leeds, and 2 in Newcastle-upon-Tyne. One fatal case of small-pox was registered in London, but not one in any other of the thirty-three great towns; five small-pox patients were under treatment in the Metropolitan Asylum Hospitals, and 1 in the Highgate Small-pox Hospital. The number of scarlet fever patients in the Metropolitan Asylum and the London Fever Hospitals at the end of the week was 1391, against numbers declining from 1554 to 1435 at the end of the preceding six weeks; 92 new cases were admitted during the week, against 101 and 104 in the previous two weeks. The deaths referred to diseases of the respiratory organs in London, which had been 553, 1317, and 1084 in the preceding three weeks, rose last week to 1248, and exceeded by 594 the corrected average. The causes of 129, or 2·0 per cent., of the deaths in the thirty-three towns were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Croydon, Bolton, Burnley, Sunderland, and in three other smaller towns; the largest proportions of uncertified deaths were registered in Liverpool, Preston, Bradford, Sheffield, and Hull.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had declined in the preceding three weeks from 27·1 to 24·9 per 1000, further fell to 23·9 during the week ending Jan. 16th, and was 9·1 below the mean rate during the same period in the thirty-three large English towns. The rates in the eight Scotch towns ranged from 16·1 in Paisley and 17·1 in Leith to 31·4 in Greenock and 38·1 in Perth. The 664 deaths in these towns included 16 which were referred to whooping-cough, 12 to diarrhœa, 7 to scarlet fever, 6 to "fever," 5 to diphtheria, 4 to measles, and not one to small-pox. In all, 50 deaths resulted from these principal zymotic diseases, against 69 and 58 in the preceding two weeks. These 50 deaths were equal to an annual rate of 1·8 per 1000, which was 1·3 below the mean rate last week from the same diseases in the thirty-three English towns. The fatal cases of whooping-cough, which had been 22 in each of the preceding two weeks, declined to 16 last week, of which 9 occurred in Glasgow and 5 in Aberdeen. The 12 deaths from diarrhœa exceeded the number in any recent week, and included 7 in Glasgow. The fatal cases of scarlet fever, which had been 9 and 4 in the previous two weeks, rose again to 7 last week, of which 5 occurred in Glasgow. The 6 deaths referred to "fever" corresponded with the number in the preceding week, and included 2 in Edinburgh. The fatal cases of diphtheria, which had been 11 and 8 in the previous two weeks, further declined to 5 last week, of which 3 occurred in Leith. The 4 deaths from measles were all recorded in Glasgow. The deaths referred to diseases of the respiratory organs in these towns, which had declined from 254 to 200 in the preceding three weeks, rose again to 226 last week, and were within 2 of the number in the corresponding week of last year. The causes of 67, or 10 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had been 45·8 and 35·0 per 1000 in the preceding two weeks, rose again to 43·8 during the week ending Jan. 16th. During the thirteen weeks of last quarter the death-rate in the city averaged 29·8 per 1000, against 20·5 in London and 25·5 in Edinburgh. The 294 deaths in Dublin during the week

under notice exceeded by 59 the number in the previous week, and included 5 which were referred to whooping-cough, 3 to diarrhœa, 2 to "fever," and not one either to small-pox, measles, scarlet fever, or diphtheria. In all, 10 deaths resulted from these principal zymotic diseases, equal to an annual rate of 1·5 per 1000, the rate during the same period being 4·1 in London and 1·2 in Edinburgh. The fatal cases of whooping-cough, which had steadily increased in the preceding six weeks from 2 to 10, declined again to 5 last week. The deaths referred to different forms of "fever" (principally enteric), which had been 10 and 5 in the previous two weeks, further declined to 2 last week, a lower number than has been recorded in any week since the beginning of September last. The 294 deaths registered in Dublin last week included 48 of infants under one year of age, and 107 of persons aged upwards of sixty years; the deaths both of infants and of elderly persons considerably exceeded those recorded in the preceding week. Ten inquest cases and 9 deaths from violence were registered; and 80, or more than a fourth, of the deaths occurred in public institutions. The causes of 31, or nearly 11 per cent., of the deaths in the city were not certified.

THE SERVICES.

Surgeon-Captain M. T. Yarr has joined the 2nd Battalion Coldstream Guards for duty as an attached medical officer.

INDIAN MEDICAL SERVICE.—*Bengal:* To be Brigade Surgeon-Lieutenant-Colonels: Surgeon-Lieutenant-Colonel Denis Francis Keegan, M.D. (dated Aug. 11th, 1891); Surgeon-Lieutenant-Colonel Stephen Coull Mackenzie, M.D., (dated Aug. 13th, 1891) (these promotions cancel those made in the *London Gazette* of Nov. 27th, 1891); Surgeon-Lieutenant-Colonel Thomas Ffrench-Mullen, M.D. (dated Sept. 2nd, 1891).—Surgeon-Captains to be Surgeon-Majors (dated Oct. 31st, 1891): George William Patrick Dennys, John William Unthank Macnamara, M.D., Joseph Sykes, and John Francis Tuohy, M.D.—*Madras:* To be Brigade Surgeon: Surgeon-Major James Byers Thomas (dated April 30th, 1889).—Surgeon-Captains to be Surgeon-Majors (dated Oct. 31st, 1891): James Cort Marsden, Francis Casement Reeves, John Leopold Poynder, and John Hoey.—*Bombay:* Surgeon-Captains to be Surgeon-Majors (dated Oct. 31st, 1891): Frederick Burness and Charles Fancourt Willis, M.D.

BENGAL MEDICAL ESTABLISHMENT.—The Queen has approved of the retirement from the Service of the undermentioned Officers:—Brigade Surgeon John Duncan, M.D. (dated June 16th, 1891); Brigade Surgeon-Lieutenant-Colonel Henry Potter, M.D. (dated Nov. 2nd, 1891); Brigade Surgeon-Lieutenant-Colonel Rajendra Chandra Chandra (dated Oct. 18th, 1891).

NAVAL MEDICAL SERVICE.—The following appointments have been made at the Admiralty:—Surgeons: Geo. Edmunds to the *Assaye*, and Richard C. Munday to the *Plassy* (both dated Jan. 23rd, 1892); Mr. Philip G. Borrowman to be Surgeon and Agent to the *Elie*, Fife, N.B. (dated Jan. 14th, 1892).

VOLUNTEER CORPS.—*Artillery:* 3rd Middlesex: Surgeon-Captain and Honorary Surgeon-Major J. Cook, M.D., to be Surgeon-Major (dated Jan. 16th, 1892).—*Royal Engineers* (Fortress and Railway Forces): 1st Aberdeenshire: Surgeon-Lieutenant J. J. Y. Dalgarno, M.B., to be Surgeon-Captain (dated Jan. 16th, 1892).—1st Volunteer Battalion, the Buffs (East Kent Regiment): Surgeon-Lieutenant S. Wacher to be Surgeon-Captain (dated Jan. 16th, 1892).—*Rifle:* 3rd (Dundee Highland) Volunteer Battalion, the Black Watch (Royal Highlanders): Surgeon-Lieutenant W. Kinnear, M.B., to be Surgeon-Captain (dated Jan. 16th, 1892).—2nd Volunteer Battalion, the Manchester Regiment: Surgeon-Lieutenant T. Carr to be Surgeon-Captain (dated Jan. 16th, 1892).

SUPERANNUATION.—Dr. Junius Hardwicke, of Chilton Lodge, Rotherham, ex-medical officer of the workhouse, has been awarded by the Rotherham Board of Guardians a retiring pension of £40 a year.

Correspondence.

"Audi alteram partem."

THE BEARING OF RECENT BIOLOGICAL RESEARCH ON THE PRACTICE OF MEDICINE AND SURGERY.

To the Editors of THE LANCET.

SIRS,—Dr. Molloy really supplies his own answers to the question or objection propounded in his letter addressed to THE LANCET of Jan. 16th. It may, however, be pointed out that the passage quoted at the top of the second column of page 13 might have explained this matter in itself had it been read with even moderate care—viz., "We must ascribe the statement so frequently made, that although the treatment with iodine and with other irritants exerts a checking influence as a whole, yet at some point or other the affection still continues to spread." This surely makes it clear enough that the old-fashioned remedies, iodine and nitrate of silver, are not thought of as being used for the first time in the treatment of erysipelas; whilst the context shows that what it is specially wished to bring out is that the *rationale* of the treatment by caustic rings was not then understood, and that such treatment frequently failed even in the hands of most experienced surgeons because the pathology of the disease had not been properly worked out; but that now this has been done and the remedy can be properly applied, the results obtained, instead of being irregular and to a great extent accidental, are in the highest degree satisfactory. All I am contending for is that every fresh advance in biological (using the term in its widest sense) research has its influence on the treatment of disease.

I am, Sirs, yours truly,
GERMAN SIMS WOODHEAD.

SIRS,—In common with Dr. Molloy, I had been taught to regard painting the edge of the inflammatory area of erysipelas as valueless, save for showing how much the inflammation spread or receded in the course of a definite number of hours. Personally, I believed it to have as little effect on the erysipelatous process itself as Sydney Smith's famous patting the dome of St. Paul's would please the Dean and Chapter. The external treatment of erysipelas which has seemed to act most powerfully and beneficially on the career of erysipelas has been that recommended by Dr. Royston Fairbank (quoted by Dr. Ringer) of making an application of digitalis in some form or other to the inflamed surface. I generally paint freely with the tincture, and have several times seen how the part painted has shrunk while the other unpainted parts have gone on swelling. Also it affords considerable comfort to the patient, and demands no skilled attention. The action depends, I suppose, on the contraction of the arterioles by the drug, thus controlling and checking the inflammation. How this can be brought into line with recent bacteriological research will be interesting to see.

I am, Sirs, yours very faithfully,
Lincoln. E. MANSEL SYMPSON, M.D.

PATHOLOGICAL CONDITIONS IN THE MAMMA ASSOCIATED WITH CANCER.

To the Editors of THE LANCET.

SIRS,—The valuable contributions to our knowledge of the pathological conditions of the breast associated with cancer given at the last meeting of the Pathological Society by Messrs. Johnson and Beadles would, I think, have been more complete had reference been made to the work of previous investigators, the accuracy of whose observations they have so fully confirmed. Mr. Beadles' remark that, after careful research into the literature of the subject, he had only found some allusions to it by Cornil and Creighton surprises me. These conditions—to which, since Heidenhain's classical researches, so much attention has been directed—were perfectly familiar to Sir Astley Cooper. He says[1]: "I would observe that the scirrhous

[1] Lectures on Surgery, 1829, p. 386

tumour is not all the disease; there are roots which extend to a considerable distance, and those who gave this disease the name of cancer probably knew more of its nature than we are disposed to give them credit for. It is supposed by some that this name was given on account of the appearance of the surrounding veins. I should rather say that it was from the appearances on dissection than from anything without. When you dissect a scirrhous tumour you see a number of roots proceeding to a considerable distance, and if you remove the tumour only, and not the roots, there will be little advantage from the operation."

Moreover, Sir Astley Cooper was also well aware that mammary cancers not unfrequently originate in outlying or sequestrated lobules of the glands. On this subject he says[2]: "The margins of the breast do not form a regular disc, but the secreting structure often projects into the surrounding fibrous and adipose tissue, so as to produce radii from the nipple of very unequal lengths; hence a circular sweep of the knife cuts off many of its projections, spoils the breast for dissection, and in surgical operations leaves much of the disease unremoved." I have shown elsewhere[3] that 9·8 per cent. of all breast cancers and 14 per cent. of adenomas originate in this way, quite outside the normal mammæ. Heidenhain[4] has conclusively demonstrated that every mamma containing a cancerous tumour is diseased throughout. Its secreting cells are unduly numerous, and they everywhere show signs of excessive reproductive activity; while the peri-acinous connective tissue is much increased and infiltrated with small round cells. Heidenhain maintains that proliferating acini of this kind left behind at the primary operation are the germs whence late recurrences originate. Moreover, he has shown that the loose areolar tissue which separates the mammary gland from the pectoralis major muscle contains numerous glandular offshoots and lymphatics which in cases of cancer are nearly always diseased. Heidenhain found, on careful examination after removal, that the disease had not been completely extirpated from this situation in twelve out of eighteen breasts consecutively amputated for cancer, and he therefore predicted recurrences, which soon followed. To obviate this he recommends that the fascia over the pectoralis major muscle and a layer of the subjacent muscular fibres should be removed in every case destined for operation, and I have no doubt whatever that his recommendation ought to be regarded as an essential feature of the operation. I am, Sirs, yours truly,

W. ROGER WILLIAMS, F.R.C.S.

Winckley-square, Preston, Jan. 18th, 1892.

THE LATE DEATH UNDER CHLOROFORM AT UNIVERSITY COLLEGE HOSPITAL.

To the Editors of THE LANCET.

SIRS,—I beg to hand you the following particulars of the case of death under chloroform which occurred at University College Hospital on the 6th inst.:—Patient was a man aged forty-eight years, very large build, with an immense amount of adipose tissue. In December, 1889, he had the anterior part of the tongue and a portion of the jaw removed by Mr. Barker for cancer. On that occasion he took the chloroform very well. Patient was readmitted on the 4th inst. for recurrence of the disease in the root of the tongue and in the floor of the mouth. On the 6th inst., patient's general condition being fairly good, chloroform was administered on lint. Patient did not breathe well from the first, but held his breath and strained a good deal. When partially under the influence of the chloroform Junker's apparatus was substituted for the lint. Shortly after this the breathing suddenly failed, the respiratory movements becoming shallower, and cyanosis very marked. The anæsthetic was at once stopped, and after a minute or two the breathing and colour improved. The anæsthetic was again given, but in a very short time the breathing again became difficult, there being slight stertor at first with marked cyanosis, and then very rapidly the respiratory movements ceased altogether. The mouth was opened and the root of the tongue with difficulty pulled forwards and the chin drawn up. This did not cause any attempt at respiratory movement. The back of the throat was sponged out and some blood and mucus cleared from it. Artificial respiration was resorted to, and afterwards laryngotomy was performed, but owing to the patient's large build and rigid thorax the former procedure was not very satisfactory. The pulse could be felt in the temporal artery at the time the respirations ceased. It seems probable that some blood from the growth in the mouth got into the upper part of the larynx at the beginning of the patient's serious symptoms, and that this was followed by respiratory failure. At the post-mortem examination marked fatty degeneration of the heart and cirrhosis of the liver were found.

I am, Sirs, yours faithfully,

WALTER W. H. TATE,
Resident Medical Officer.

London, W.C., Jan 10th, 1892.

A SUGGESTION FOR THE TREATMENT OF IRREDUCIBLE INTUSSUSCEPTION OF THE BOWELS.

To the Editors of THE LANCET.

SIRS,—I have read with much interest Mr. Arthur Barker's paper upon the above subject, the more so as it describes an operation for the relief of certain forms of intussusception of the intestine which is in principle the same as I have advocated in my lectures on intestinal obstruction for the last two or three years, and which, in my work on "Surgical Diseases of the Intestine," now in the press, I have fully described and illustrated. Mr. A. Barker will be interested to hear that last year, in conjunction with Dr. Morrotti, I made a series of experiments with a view of testing the feasibility of the operation. All these experiments, three in number, were successful. The steps I adopted were as follows: In the first place, I created an artificial intussusception, and allowed this to exist from six to ten days before operating for its relief; at the end of this time I found the invagination firmly adherent at the point at which the intussuscipiens receives the intussusceptum; the former was somewhat congested and œdematous. I made a longitudinal incision into the intussuscipiens on the side furthest from the mesentery, directly over the intussusceptum, about an inch and a half long, so as to allow of my being able to have a good view of, and sufficient room to cut, the intussusceptum across through the opening. I next seized the invaginated piece of intestine with vulsellum forceps and snipped it across about half an inch from the proximal end, catching up and tying any vessel that needed it, then with a series of interrupted sutures stitched the divided ends of the stump around, and returned it into the intestine, closing the longitudinal opening in the intussuscipiens with a double row of chromic gut sutures. This operation, although the same in principle as that described by Mr. Barker, differs in one or two material points. First I used no sutures to unite the bowel at the point at which the intussuscipiens receives the intussusceptum, as I found the intestine firmly adherent at this point already; even if this should not be the case, three or four quill sutures would, I think, be quite sufficient to prevent any fear of accident arising from the slipping out of the intussusceptum, as the divided ends were firmly united by a number of interrupted sutures, which should be quite sufficient to secure firm union. With respect to sutures, I invariably use chromic gut for all intestinal suturing, whereas Mr. Barker still uses silk sutures, and for suturing the stump he used stout silk. This, in my opinion, is not devoid of danger in the future. The chromic gut, in my experience, lasts quite long enough to allow of firm union of the peritoneal surfaces. It is then absorbed, and no further trouble can arise, whereas silk will remain an indefinite time, or until it ulcerates out and passes away. This has been proved in one case of gastro-enterostomy, which died over four months after the operation, and the silk sutures were found hanging in the stomach. The same thing were found in Mr. Barker's case of gastro-enterostomy, when 2½ in. of silk thread were found hanging from the artificial opening into the stomach seven weeks after the operation of gastro-enterostomy. I think the method of dividing the intussusceptum *in situ* is preferable to attempting to draw it out of the incision in the intussuscipiens and then dividing it, as there is less risk of

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[2] The Anatomy of the Breast. London, 1840, p. 13.
[3] The Journal of Anatomy and Physiology, vol. xxv., 1891, p. 244.
[4] Ueber die Ursachen der lokalen Krebsrecidiven nach Amputatio Mammæ. Arch. fur Klin. Chir., Bd. xxxiv., 1889, S. 97.

injuring the intestine, already weakened, by tearing or bruising.

To Mr. Arthur Barker undoubtedly is due the credit for having suggested this operation at the Royal Medical and Chirurgical Society in 1887, although until he drew attention to it I was unaware of his suggestion. Professor Senn, also, in the *Canadian Practitioner* for August, 1891, has suggested a similar plan of treating certain forms of irreducible intussusception.—I am, Sirs, yours faithfully,

FREDK. BOWREMAN JESSETT.

Upper Wimpole-street, W., Jan. 11th, 1892.

INFLUENZA.

To the Editors of THE LANCET.

SIRS,—I shall feel obliged if you will allow me to state, in answer to numerous inquiries from medical practitioners, that I consider salipyrin (salicylate of antipyrin) the most effective remedy for combating the feverish attack of influenza. Salipyrin, the properties of which have been studied chiefly by P. Guttmann, Von Mosengeil, Hennig, and others, is a white crystalline powder which is nearly insoluble in water, but soluble in alcohol, and has the composition $C_{18}H_{18}N_2O_4$. It may be given in powder or in a mixture, which should be well shaken, with tincture and syrup of orange peel. The average dose is fifteen grains, which should be repeated at first every two hours. After four or five such doses have been given, there is in most cases an extraordinary change for the better; and if continued afterwards at less frequent intervals, the patient progresses rapidly towards recovery. I have given it chiefly in protracted and alarming cases where antipyrin and phenacetin had already been administered, and where, in spite of these remedies, the fever, prostration, and somnolence were becoming aggravated. The drug appears to have no injurious influence on the heart and other important organs; indeed its beneficial effects on the pulse have been most marked. I need not add that every case has to be treated on its own individual aspects, but think that salipyrin will be found to prove our sheet-anchor in the treatment of the feverish attack of grip. I am, Sirs, yours faithfully,

Jan. 15th, 1892. JULIUS ALTHAUS, M.D.

To the Editors of THE LANCET.

SIRS,—Seeing in your columns a theory put forward by Dr. Althaus, to the effect that the influenza poison attacks chiefly the centres of the bulb, I tried to imagine a clinical picture of such a disease, with this result. The patient is suddenly seized with one or a combination of the following symptoms: choking, loss of voice, fainting, dyspnœa, general flushing or pallor of skin, perverted action of iris, glycosuria. In the cases of recovery from the first seizure the symptoms begin to remit, and during their cessation the patient feels quite well and is desirous and capable of performing acts of great mental and physical exertion. The total absence of pain throughout is a remarkable feature of the disease. It is difficult to recognise any likeness between such an attack and the present epidemic. Yet there is little doubt that influenza does act with disproportionate severity upon the nerve centres compared with other fevers. But this it does generally pretty much inversely according to their stability, the vital centres being as a rule least affected, for influenza is usually a mild disorder. When, however, bulbar symptoms do occur, they are very striking, and are apt to draw the attention from te hmore typical and common symptoms. With respect to treatment, considering the depressing nature of the disease, is the routine prescription of such depressing drugs as antipyrin and salicylate of soda justifiable? The pains of the disease are usually quite bearable when the patient is at rest, as he should be, and pyrexia is seldom a cause of alarm. I would contend, therefore, that the use of antipyrin as a rule should be restricted to those cases in which the pain is unbearable or when hyperpyrexia is present. I am, Sirs, yours faithfully,

THOS. GLOVER LYON.

To the Editors of THE LANCET.

SIRS,—The almost undisputed fact that influenza is contagious seems to be drawing us away from the, to my mind, equally incontrovertible fact that the contagium is air borne, and, though hitherto not indubitably detected, is nevertheless almost certainly a pathogenic germ. The practical consequence of any such error in our efforts to combat the ravages of this disease is obvious. I have already several times (thanks to your courtesy) recapitulated the evidence in favour of an air-borne contagium; the suddenness of invasion, the numbers simultaneously attacked, the fact of crews far out at sea being affected, all point to this conclusion. But a curious misapprehension seems to exist that this theory is incompatible with personal infection. So far from this being the case, the two theories—or, rather, facts—fit one another exactly. The contagium is at first always air borne, but each person as he is infected becomes a fresh nidus, or hotbed of contagion, because fresh spores are generated in enormous numbers in his body, and are of course most numerous and virulent in his immediate vicinity. In this sense influenza is undoubtedly infectious, but not the less is the contagium aerial. Another fact which is in danger of being overlooked is the extreme frequency, I had almost said universality, of pneumonic congestion in influenza. One would naturally expect in an air-borne contagium that the respiratory tract would be the first affected, and this is precisely what occurs, I believe, in almost every instance—a typical pneumonic dulness, a slight hepatisation, may be detected, if only it be diligently sought; so frequently is this the case that I am disposed to regard influenza as an epidemic pneumonia. When the lungs are not implicated the bronchial passages or the mucous surfaces of the eyes or nose are often affected, and not unfrequently the intestinal tract. The intense nervous prostration which is so characteristic of true influenza is not, I believe, the primary affection, but rather the result of the poisonous action of the pathogenic spores on the organism. The interesting letter of Dr. Alfred Carpenter, in your issue of Nov. 21st, affords evidence strongly confirmatory of that quoted in my communication of Nov. 14th on the etiology of influenza as to the mycotic origin of the disease. Another interesting point to which I should like again to call attention is the profound effect produced by the influenzal poison on other concurrent illness. It will be found that during epidemics of influenza all diseases are liable to assume a lower, graver, and more adynamic type, the nervous system being especially depressed. It is for this reason that so long and varied a list of symptoms have been ascribed to influenza. These ought rather to have been assigned to an infinite variety of diseases modified by the depressing action of the superimposed influenza. I am, Sirs, yours truly,

Folkestone. CHARLES EGERTON FITZGERALD, M.D.

To the Editors of THE LANCET.

SIRS,—It is said, and most truly, that the experience of most in our profession is lost because it is never given publicity, and we carry our knowledge to our graves and bury it with our bodies. I am therefore induced to relate the following case. Last April I had a sharp attack of influenza and had to go away, leaving my son in charge of my practice. He took the disease, and worked very hard for ten days with it, when I returned; then he caught a chill, was attacked with severe catarrh of the bowels, with copious diarrhœa; this lasted for forty-eight hours. Then suddenly he was seized with double pneumonia and pleurisy in left side; great cardiac disturbance, with irregular, running pulse, which could not be counted; respiration 40, temperature 103°; countenance anxious, features pale, pinched. I applied immediately a large liquid fly blister to the left side, prescribed sulphate of ether and digitalis, with brandy and beef-tea, and sent for a medical friend at once. He gave me little hope; the case looked desperate. I proposed hypodermic injection of morphia and atropia. This, he said, would kill him, and he implored me not to venture on such a strong measure under the circumstances. There was great restlessness, and my son asked for the morphia to be given. My friend said "This life is so valuable, and is in such terrible danger, I wish to send for Dr. ——," and telegraphed for him to come as soon as possible; but meantime something must be done, and done at once. I believe with Dr. Samuel Wilks in the power and value of opium in all acute inflammatory conditions, and on my own responsibility I injected one-third of a grain of morphia and one-hundredth of atropia at 10 o'clock; every hour or hour and a half he

had one ounce of brandy, with four ounces of strong soup. The blister acted splendidly, and the morphia allayed the general irritability almost immediately. Pulse improved; respiration slower; lungs no better; consolidated to a large extent. During the following twenty-four hours he had about three quarters of a bottle of the very finest brandy. The following morning we three doctors met. The case still looked hopeless, and my conduct regarding the morphia was spoken of as being bold, and that they dared not have used it. That night I injected half a grain of morphia and one-hundredth of a grain of atropia at 10 P.M. At 1 A.M. he awoke greatly relieved, after a quiet, refreshing sleep, all symptoms yielding; expectoration very difficult, the matter being tenacious, mucous, and bloody. Slept till four, and felt so much better that I left him with his experienced nurse. For a week he expectorated large quantities of bloody mucus, which was only dislodged by violent efforts. He made a perfect recovery, and in a month's time there was not a trace of any of the fearful symptoms he had suffered from. I am as convinced that the morphia injections saved life in this case as I am of the fact that I am writing at this moment; had I followed the advice of my *confrère*, which was to administer thirty grains of sulphonal and wait for two hours, I firmly believe death must have followed. In such a case sulphonal or sawdust would have been of very much the same value, and I question if the usual dose of morphia would have been of greater. The large dose acted not only as a sedative to the brain, but as a tonic to the pneumonic and cardiac nerves, and thereby gave the heart and lungs the help they stood so much in need of.

I am, Sirs, yours truly,

Harrogate, Jan. 19th, 1892. A. S. MYRTLE, M.D.

THE INFLUENZA AND SMOKE.

To the Editors of THE LANCET.

SIRS,—Having at the commencement of the present month suffered from a very severe attack of influenza, which for some days confined me to my bed, and for many days to my room, I was led for the sake of occupation to take out my microscope with a view to the examination of the bronchial secretions. Using a Zeiss $\frac{1}{12}$ oil immersion, I found that micrococci, which may not infrequently be found in small numbers, were exceedingly prevalent in the discharge. What, however, I desire particularly to call attention to is the following fact. I live in a very smoky district of a very smoky city, and naturally much carbon enters the lungs in the form of finely divided smoke and coal-dust. For some reason this carbon is not equally scattered throughout the bronchial secretions, but becomes aggregated into comparatively dense patches. Now, wherever these carbon patches were the most dense, there were the micrococci most numerous, sometimes being concentrated in such quantities as to form a zoogloea-like mass of carbon and cocci mixed.

The conclusion I drew from these examinations, which were frequently repeated, was the fact that carbon in a very minute state of subdivision may, and probably does, favour the development of certain forms of micro-organisms. I am not prepared to say that the micrococci I saw were pathogenic, but it is clear that if they were so the conditions favouring their development are specially to be found in our large and smoky cities; and thus we may to some extent account for the increased mortality from epidemic diseases of the respiratory organs when they occur in these localities. For instance, last week in Newcastle-on-Tyne the mortality reached the appalling figure of 45 per 1000, there being an increase in the number of deaths from diseases of the respiratory organs in the proportion of 53 to 17, which was the weekly average for 1890. Living amongst a mining and coal working population I have long had an idea that there was some cause which rendered them specially liable to diseases of the respiratory tract, especially when these occur in an epidemic form; also to other infectious and suppurative diseases which are now generally supposed to bear some relation to the existence of certain micro-organisms. Perhaps it is in the direction above suggested that it may be found. My attention is daily being directed to the extraordinary frequency with which the most trivial corneal wounds lead to destructive suppuration, not in the subjects of broken down and diseased constitutions only, but in vigorous young men in the prime of life. These disastrous results are quite out of proportion to anything we meet with in the same class of accidents occurring in the ordinary civil population, and must have some special cause, if we could but find it out. Possibly it may lie in the direction of the influence of carbon in a state of minute subdivision upon the development of micro-organisms, if this can be established as a fact. I do not know if anyone has already made such a suggestion, but I think it is a subject which might repay the attention of some experienced practical bacteriologist.

I am, Sirs, yours faithfully,

CHRISTOPHER S. JEAFFRESON, M.D., F.R.C.S.EDIN., F.R.M.S.

Newcastle-on-Tyne, Dec. 31st, 1891.

FOOD INTEMPERANCE: HYPERPHAGY, POLYPHAGY, OPSOMANIA, SITOMANIA.

To the Editors of THE LANCET.

SIRS,—My attention having been a good deal directed of late to various abnormalities in the matter of taking food (independently of the Christmas season), I venture to think that the following few remarks on some of them may prove to be not without interest to your readers. So important a subject as intemperance in food, and the consequences which ensue thereon, has not hitherto, so far as I am aware, received the attention which it deserves, although the kindred vice or malady—call it as you will,—intemperance in drink, has probably received more than its due share of public attention. The columns of the leading journal lately bore voluminous testimony to this, and although the subject is quiescent for the time, we shall probably not have long to wait for a renewal of newspaper strife, and an attempt to determine the acceptability and the virtues, or otherwise, of the two-ounce allowance. A consideration of the subject of food intemperance somewhat naturally leads to the sub-division which I have placed at the top of this letter. Abstinence from food and the various causes which conduce to it, having already been dealt with by me elsewhere, are here omitted.

The hyperphagist is met with every day and everywhere; indeed, I fear we are all more or less hyperphagists, and consume a great deal more food at each meal than is at all good for us, or necessary for the physiological requirements of repairing waste and maintaining nutrition at its proper standard. Few of us have the courage to stop short of satiety, and no doubt many minor ailments—nay, even some of the major—are directly due to hyperphagy.

The pronounced glutton—the polyphagist, as I venture to name him—is, fortunately, more rarely met with. The man who gorges himself with food for the mere pleasure of doing it is not a desirable object to witness, but in its many and more modified forms polyphagy, as everyone knows, is not an uncommon vice.

Closely allied to polyphagy is another, and, as many will think, a more excusable vicious practice, to which I would refer as opsomania. It is an overpowering desire to indulge in dainties and sweets to excess. It is often surmised—I am sure with injustice—that ladies are especially prone to this malady.

But perhaps the most rare as well as the most interesting food abnormality, or intemperance, from a psychological point of view, is that which remains to be described, and which for want of a better name I shall call sitomania. Some such definition as the following may be applied to it. "A mania occurring periodically, characterised by loss of volition and an overwhelming desire to partake of food to an unlimited extent, followed by remorse, depression, and tendency to suicide." In many respects this form of disease resembles the now well-known and defined disease dipsomania. In both there are intervals, often prolonged, during which an entirely normal state prevails; there is no undue desire in the one case for excess of food, in the other case for drink. Then, often suddenly, there ensues a wholly uncontrollable desire in the one case for a food gorge, in the other for a drink excess; in both the essence of the disease is the secretiveness with which the orgie is conducted; there also ensues in both, when the orgie is over, the same feeling of intense depression and remorse, and in some cases a tendency to

suicide. The sitomaniac adopts much the same means of gratifying his desires as those adopted by the dipsomaniac. When the attack is impending, he, a gentleman of high honour at all other times, will condescend to acts of indescribable meanness and deceit; he will rob his best friends, indulge in petty pilfering, even sell the clothes off his back, and reduce himself to absolute poverty to find the means for this morbid indulgence in food.

I am, Sirs, your obedient servant,

West Malling, Kent, Jan. 9th, 1892. JAMES ADAM, M.D.

THE MEDICAL DEFENCE UNION.

To the Editors of THE LANCET.

SIRS,—The report of the meeting of the Medical Defence Union on Jan. 7th, sent to you by Dr. Leslie Phillips, is very inaccurate, to say no more. The meeting was as far as possible from being "representative," and was very badly attended, consisting almost exclusively of a handful of local doctors. Again, the statement that I "reflected upon the president and council" &c. is simply untrue. With regard also to the statement put into the mouth of Dr. Saundby, accusing me of imputing "mala fides" (which, being interpreted, is bad faith) to my colleagues and making unfounded assumptions against my professional brethren, I do not remember his saying anything of the kind; but if he did say so, he stated what was false. I feel sure that, as a gentleman, he will either repudiate or substantiate the charge. In reply to Mr. Lawson Tait's statement "that the Court of Appeal, in a similar case, decided it exactly opposite to my contention," I can only say that if he will condescend to cite the case to which he alludes I will soon convince him that he mistakes the drift of the decision. The only reply to my arguments, further than this inaccurate statement of law, is a reference to the above insignificant meeting, and to the proxies on either side. With regard to the latter, I discouraged the sending to me of proxies, of which I had a good many offers; while Mr. Lawson Tait issued to those members whom he did not know to be hostile stamped proxy papers printed in his favour. With regard to these, I ask Mr. Lawson Tait whether they were issued at the expense of the Union. I should consider the use of the funds of the Union for such a purpose unjustifiable in the extreme. At the meeting on Jan. 7th Dr. Saundby and others assured me that they would be very glad if a few hundreds would leave the Union, as it was getting inconveniently large, and they did not at all wish it to increase. With such views as these I am hopelessly at variance. The annual meeting of the Union has been in London hitherto. I presume it will be in Birmingham this year. If the opinion of the majority of the Union had been desired, one of the meetings altering the articles would have been called in London. When I know the actual opinion of the Union I shall know whether I can continue to serve on its council and to contribute to its funds.

I am, Sirs, yours faithfully,

Highgate, Jan. 19th, 1892. HUGH WOODS.

THE TREATMENT OF ERYSIPELAS.

To the Editors of THE LANCET.

SIRS,—The recent correspondence in your columns on erysipelas induces me to recall a method of treating this disease, invented in the pre-microbic era 1874–5, when antiseptic surgery was only practised in out-of-the-way places and the phagocyte unknown. The method simply consists in applying constriction, in some suitable way, above or beyond the rash. The original paper, a thesis for the M.B. Cantab. 1875, was deposited in the defunct *Medical Times and Gazette* on April 18th, 1885, and I now resuscitate it partly because I think the results obtained by the treatment advocated therein deserve to be more widely known, but partly also because I am curious to learn how extreme phagocytists would explain results obtained by merely mechanical means.

I am, Sirs, yours truly,

Suffolk-street, S.W., Jan. 16th, 1892. R. G. HEBB.

LITERARY INTELLIGENCE.—Messrs. Cassell and Company have announced the publication in a few days of "The Year-book of Treatment" for 1892.

MEDICAL FOLK LORE IN THE HIGHLANDS OF SCOTLAND.

(FROM A CORRESPONDENT.)

THE student in any branch of knowledge has always open two main sources of information: on the one hand current Science, on the other popular Lore. The first gives him, in definite compass, by recognised authority, certain accepted views tinged always by the general interpretations of the time. The second, if he extend to it his inquiries, he will find to be a vast repository of bygone views and interpretations. The shades of former orthodoxies, ideas long dead to latter-day science, here actually survive in our midst, embodied in numberless proverbs, beliefs, and observances. Of this vast mass of folk lore, and especially of that which relates to Medicine, it is obvious that the essential part is a collection of *acts* and not words. It is essentially an embodiment of custom and usage, and is constantly fluctuating and altering in character. One may regard it at any time as the last term of a long series stretching back since folk began, and yet, with all its antiquity, continually subject to additions and subtractions. Many old cures die out for want of support in the popular mind, whilst on the other hand no great lapse of time is required to remove a new idea, and the practices founded upon it, from its favoured place in the medical mind to the traditions of the people. The springs of science constantly follow that course, taking up the characters of the strata through which they percolate, and, issuing in mingled forms, supply, if not the genesis, at least the constant replenishment of popular knowledge and practice.

The most cursory examination of medical folk lore reveals an infinite variety of means and modes of cure, many no doubt of great antiquity. The following examples are taken from one limited district of the Highlands. It is not easy in some instances to form any opinion of their origin, but for the most part they fall naturally into a few groups, according to the main principle or ruling idea on which they seem to be founded.

1. Beginning with the most rational of these principles, there is first a very large group of practices resting on a basis of empiricism or experience. This much-abused principle grows in dignity when it is remembered that experience, however rude, passes by insensible degrees into the scientific method of precise experiment, on which modern medicine endeavours with more or less success to establish its practice. For examples of this most rational group: Some recommend that in whooping-cough the child should be taken across a ferry; others that he should above all go to live in another property; others that he should go to a house where master and mistress have possessed the same surname. All these procedures involve change of air, which has in such cases no doubt been found beneficial. On the same general principle, colt's-foot is used in asthma, warts are washed in pig's blood, and a person with weak lungs takes with great advantage a preparation of twenty-four different herbs, which occupied several weeks to collect. "Holy wells" come under the same class of remedies, for, in the first place, they are esteemed "holy" because curative, and only subsequently curative because "holy." With respect to the treatment of sprains, the very diverse and prevalent practices used under the name of "bone-setting" clearly come under this head; but another, and in this district equally common, mode of treating sprains is to tie a piece of red thread (some prefer white) around the injured part. The curative virtue of the thread or "strivan" is implicitly believed in. Considerable force is often used in applying it, and sometimes it seems to exercise a certain amount of support; so that probably this practice also, like manipulation, rests on an experiential basis.

2. The second principle, *similia similibus curentur*, underlies many popular curative practices of great antiquity, and is still frequently illustrated in contemporary medical lore. Common erysipelas (called by the Highlanders "the rose") is a case in point. "The doctors is verra ready," said one old patient, "but they've no sense wi' the rose." She went

on to say that a bit of red cloth certainly prevents the return of the malady. "I wear a bit scarlet comin' doon ower mi' head for that verra purpose itsel' every day o' the year." An infusion of adders' heads is used as a dressing in snakebite, and, it is said, with excellent results. Another supposed remedy of a somewhat extraordinary character appears to rest on the same principle. It is for epilepsy ("falling sickness"); and in two cases known to the writer has been actually put in practice in recent years. This is no other than the scrapings of the inside of the skull of a man recently dead, in the one case of epilepsy, and in the other by suicide. The directions are to "scrab it wi' a knife, and tak' it in water, as much as a pooder o't." In the second case the patient himself, a man from the far north, procured the necessary material by exhuming the body of the suicide at night.

3. We come now, in the third place, to a large group of practices based on the principle of substitution or imagery, and on the seductive habit of reasoning from imagery. This principle has not been without an influence on medical opinion, and is probably the ancestor of the doctrine of *similia similibus*. It underlies the customs and beliefs of pre-scientific men to an astonishing extent. It is exhibited in numberless rites, from propitiatory offerings and sacrifices downwards; and it is important to observe that all early ideas of imagery, even in practices affecting the human body, imply the exercise of what we call "supernatural" power. There is therefore in all cures coming under this head a belief, generally ill defined and sometimes unconscious, in the coöperation of unseen powers. For warts a small piece of meat (some prefer three knots from a stalk of barley) is buried with certain formalities. As the meat decays the warts disappear. For epilepsy a famous cure is to bury a black cock alive, if possible at the spot where the first fit occurred. This is clearly propitiatory, and is paralleled by closely similar rites among different tribes. Of this barbarous proceeding the writer is now aware of six modern instances. One of the latest was accompanied by the prayers of an esteemed elder, who is said to have attended the ceremony for the purpose. Some say that it is necessary to inter with the cock some of the patient's hair and nail parings, and, according to one account, a small bird known as the "cnag" must share the same fate. It is also stated that a black cat would do if the cock were a-wanting; and that the place of burial must never afterwards be disturbed or the complaint would return. *Apropos* of epilepsy, although it is a departure from the order of discussion, one or two curious beliefs may be noted. The epileptic who has fallen into fire or water can never be cured. If a child or even grown person pass between the patient and the fire he will run the risk of taking the disease. Even if a dog or cat passes in the same manner, the animal may carry the disease to a healthy person. One who has been cured may not touch a dead body or even see a funeral without endangering the return of the disease. In the two following incidents, although there was no question of epilepsy, the same curious ideas find a place. An old neighbour lost his "good-father" some years ago after a long illness during which a favourite cat had been much attached to the sick man. The night he died the two sons thought it needful to drown the cat, lest after approaching the remains it should carry evil to others. In the second case the informant relates that her grandfather was in a house where someone had just died. The window was unfortunately left open, and the cat leaped into the room over the dead body. The animal then approached the old man, with the result that he soon after took a severe fit. "They put the cock under him" (!), but all was unavailing.

The most perfect example of practices founded upon imagery and substitution is afforded by the use in witchcraft of *Cuirp Creadh*, or clay bodies. Nearly half a dozen instances have now been met with in this district in which women with malignant purpose have fashioned clay images representing the person to whom they desired ill, and then subjected the work of their hands to slow destruction. Some years ago a fine healthy lad fell sick. Witchcraft was thought of, and suspicion fell on an old woman to whom the young man had behaved disrespectfully. Advice was therefore taken in Inverness of an ancient dame who was generally credited with uncanny powers, and she, without leaving her own door, directed the friends to return home and look behind the house in a certain stream. This they did, and found a clay image partly destroyed by running water. Moreover, to make destruction doubly sure the end of an old sword blade had been driven into its side. They removed the *cuirp creadh* with great care and took it into the house, but the damage had gone too far and the man died. In most of these cases the image has been stuck over with pins, and in one instance the victim complained during his illness, which was fatal, that he had pain as if all the pins in Dingwall were stuck into him. Closely similar practices, even to the minutest detail, are found to be almost world wide.[1] The ruling idea of imagery is illustrated in the rude curative practices of all nations. The Philistines of old sought relief by forming golden images of the tumours that afflicted them, and the physicians among the North American Indians fashion a representation of their patients' disease, and carry it off to the woods and bury it. So in all ages to walk by sight for a little space helps faith on a long journey.

4. There is still another group in which the practices of healing are founded simply and solely on the possession or assumption of supernatural power. It is worthy of note that here the cure is always subject to the observance of certain definite rules. Persons gifted with powers of this kind will not under any circumstances accept payment for their services. Again, some secret words or form of prayer appear to form a necessary part of the method, and this secret the possessor dare not divulge. At the same time he may not die without transmitting it to another, and this other must always be of the opposite sex. Usually the power of any individual is limited to a particular complaint, or group of associated complaints, and there is hence great variety of gifts. The man who killed the cat on the night of his father's death is credited with special powers for stanching the flow of blood. This he does without seeing the sufferer; he has simply to know the name. Another has similar powers in regard to toothache, and a third in affections of the throat or eyes. It is said that nobody in this region would dream of consulting a medical man for rickets. A wise woman is called in and goes through a succession of movements variously described, accompanied by certain words. For sprains, and perhaps for fractures, there likewise seems to be special gift to special persons. These are not to be confounded with ordinary bonesetters, in whom the practice rests, as we have seen, on a different footing. For scrofula (King's evil) there is the great and much-prized instrumentality of the "seventh son," who is regarded in the Highlands as gifted with altogether exceptional powers of healing. The writer has known of three of these individuals. Common water, when drawn and given by such a one, is reckoned an infallible cure for this complaint. Any seventh son will possess the power if certain formalities are observed at his birth, and provided also—and this is a suggestive circumstance—that he has not been convicted of serious sin. A further curious instance of the purely supernatural in a curative practice is the use of "silver water"—water in which silver has been dipped, with certain observances—to remove the effects of the "evil eye." One more example must conclude the series. Not long since a shepherd, from motives of revenge, was laid under the enchantment of a woman. Having been ill two years, and becoming worse, his friends consulted another wise woman. She pitted her power, so to speak, against that of the first, and succeeded, by the use of certain procedures, in breaking the spell and removing the evil! This is certainly an extreme case, in which we have proceedings founded on the idea of one supernatural power counteracting and defeating another; but to these extreme cases there is an easy gradation from the simplest and commonest modes.

NORTHERN COUNTIES NOTES.

(FROM OUR OWN CORRESPONDENT.)

Influenza in the North of England and the Borders.

THERE is scarcely anything of note to write about except influenza and its ravages as regards the northern counties, and over the borders it may be said to be everywhere, and almost in every house. A large number are affected at Langholm, including a large percentage of those employed at the woollen mills. Masters and men have been down,

[1] See Sir John Lubbock's History of Civilisation &c.

and in many houses all members of the family have been stricken simultaneously. Coming on to Carlisle, it is said to be more widely prevalent than ever. Most of the Church of England clergymen have been already down with it and are on the road to recovery. It is said now that most of the Methodist ministers in the town are also stricken. The places of worship are so poorly attended that it is evident that a great proportion of the inhabitants are afflicted with the scourge. The death-rate of the city of Carlisle has been very high for the past two weeks—nearly double the average. Upon the various large works of the city and in the post-office and other institutions work is severely crippled by the large number of hands on sick leave. At Hexham the medical officer of health, Dr. Jackson, reported that the death-rate of the last quarter of 1891 was equal to 42 per 1000, and was the highest noted since 1875. This high rate was principally due to whooping-cough, measles, and various diseases of the respiratory organs. At Kendal and Wigton influenza is reported to be very bad.

Influenza is prevalent about Middlesbrough, and Dr. Ketchen, one of the oldest practitioners in the town, fell a victim to pneumonia following influenza after a brief illness. Dr. Ketchen was attended by various medical friends, and was also seen by Dr. Eddison of Leeds. Medical men are so low now in their stock of vitality from continued overwork that they stand a poor chance of recovery when attacked with pneumonia. It would be well for them to remember that the strain is very great to their constitutions, and the epidemic exceptional, and they should in the case of large practices secure efficient assistance in time. A horse even cannot be kept running continuously, nor can a medical man go on without rest, food, and sleep. I mention this because many have told me of the large amount of work they are doing just now, often single-handed, or with their ordinary assistance—but at what a cost to health and risk to life!

With regard to the importation of influenza from foreign ports, it was mentioned at the last meeting of the Tees sanitary authority that 179 vessels had been inspected during the past month, and that no case of influenza or infectious disease had been noticed. This, it was mentioned, was contrary to the popular opinion that it was imported by vessels from foreign ports. The outbreak of the disease in isolated dwellings shows, I think, very clearly that it is malarious or atmospheric, and the prevalence of the disease amongst the lower animals supports this view.

Newcastle-on-Tyne, Jan. 21st.

SCOTLAND.

(FROM OUR OWN CORRESPONDENTS.)

The Death of H.R.H. the Duke of Clarence.

TO-MORROW (Wednesday) being the funeral day of H.R.H. the Duke of Clarence, the classes will not meet either in the University or in the Extra-mural School of Medicine.

Edinburgh Royal Infirmary.

An adjourned meeting of the contributors to the Royal Infirmary was held on Monday last, to consider the plan, of which an outline has already been given here, for the extension of the infirmary buildings as proposed by the managers. A good deal of discussion took place, and the plans and proposals were objected to, and it was finally agreed that the plans be recommitted to the managers for consideration, their report to be laid before a meeting of contributors to be specially convened to consider them a month hence.

Health of Edinburgh.

The mortality last week was 93, making the death-rate 18 per 1000. Diseases of the chest accounted for 51 deaths, and zymotic diseases for 4. The intimations for the week were typhoid fever 6, diphtheria 5, scarlatina 24, and measles 20.

Examinerships in Edinburgh University.

Of the examinerships which fell to be filled by the University Court the following are among the appointments:—Prof. Stirling to Physiology, Dr. W. Craig to Materia Medica, Dr. A. Bruce to Pathology, and Dr. Beatson to Surgery.

Aberdeen City Hospital.

The sub-committee of the Public Health Committee of the Aberdeen Town Council appointed to investigate into certain charges made against the City Hospital, have submitted their report to the Town Council, and conclude that they have every reason to believe that the management of the hospital is thoroughly efficient, and that, as far as possible, every care is exercised for the purpose of seeing that both children and adult patients are kindly and properly treated. The whole of the patients who were examined bore testimony in favour of their kindly treatment in the hospital.

Jan. 19th.

IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

Dublin Hospital Sunday Fund.

THE total receipts for the collections in aid of the Dublin Hospital Sunday Fund held last November amounted to £3982 19*s.* 5*d.*, which includes a sum of £66 17*s.*, the proceeds of a match between the Leinster Branch of the Irish Rugby Football Union and the Hospitals' Team. The total shows a falling off of £205 3*s.* 6*d.* as compared with the year previous.

Proposed National Hospital for Consumption for Ireland.

The promoters of the proposed hospital for phthisis point out the necessity for a hospital of the kind in the vicinity of Dublin. During the last few years great advances have been made in the knowledge of this disease; its method of spreading infection has been clearly demonstrated, and its treatment has been much improved. It follows that there is great need of a hospital where phthisis can be properly treated, and which will be both a curative and preventive institution. The malady is a very common and very fatal one in Ireland, accounting for about one-tenth of the deaths from all causes. It is proposed that the scheme shall include the establishment of a hospital for at least 100 beds, which shall be vested in a Board of Trustees appointed by contributors to the building fund. If the scheme is carried it will materially benefit the general hospitals, relieving them of their phthisical cases, the treatment of which, necessarily of a lengthy and costly character, cannot be successfully carried out in such hospitals.

Poor-law Returns for 1891.

By a recent return of the Local Government Board it appears that the total expenditure in 1891 for the poor-law services was £1,407,886, or an increase of £6014 over 1890. The expenditure was under the heads of in-maintenance, out-door relief, expenses under the Medical Charities Act and under the Public Health and Superannuation Acts, &c.

Death of Mr. Zachariah Johnson, A.M., F.R.C.S.I., of Kilkenny.

I referred last week to the serious condition of this gentleman, who at a very advanced age was a sufferer from influenza. I regret to state that his death took place on the 12th inst., at the age of eighty years. Mr. Johnson was surgeon for many years to the County Infirmary.

Cork Poor-law Medical Officers Association.

A meeting of this Association was held on Saturday last to consider what action should be taken in reference to the Bill entitled Medical Charities Amendment Bill, 1892, about to be brought in by the Irish Medical Association. Mr. Keating proposed the following resolution: "That we regard the draft Bill of the Irish Medical Association (entitled Medical Charities Amendment Bill, 1892) as an attempt to delay useful legislation on the subject of poor-law medical reform in Ireland; if such a Bill be introduced into Parliament we pledge ourselves to give it every opposition in our power; and we decline to accept any Bill as a settlement of our claims which does not deal with the questions of pay, pension, and annual holiday." Dr. Sandiford also spoke in opposition to the proposed Bill, and seconded the resolution, which was adopted. The Association now numbers over seventy members.

Barrington Hospital, Limerick.

The efficiency and increasing benefits bestowed by this Charity are well maintained. During the past year 501 patients were received into the hospital (the highest record of intern patients), and 2530 were treated as extern cases in the dispensary. The parts of the house and ground which were formerly held by the City Dispensary have been improved and put in good order. The old dispensary rooms have undergone necessary renovation and cleansing, and, as soon as the furniture has been supplied, will be ready for the reception of private patients.

Union Medical Officers.

At a largely attended meeting of the County Limerick Branch of the Irish Medical Association, Dr. Thomas Hayes (Rathkeale) in the chair, the following resolutions were passed without dissent:—"That union medical officers should be permitted to retire on a pension of two-thirds of salary and emoluments at twenty years, and upon full value at thirty years' service. That the fees for registration and vaccination should be equalised with those obtaining in England and Scotland. That we are unanimously of opinion that the present salaries of Poor-law medical officers are wholly inadequate, and should be increased by 75 per cent."

Jan. 19th.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

Influenza in France.

ALTHOUGH Paris itself may be congratulated on being comparatively exempt from the scourge which is playing such sad havoc in different parts of England, other districts of France have not been so fortunate. In the coal-mining department of the Pas-de-Calais quite a fifth of the population is *hors de combat*. At Cherbourg, seventy-three persons succumbed to influenza in the first week of this month, and at Saint-Etienne the mortality has increased 45 per cent. Lille, Roubaix, Tourcoing, and Dunkerque are being severely tried; and at Prades, in the Pyrénées-Orientales, the mean mortality is tripled, in one instance four out of a family of five persons having died. I may mention that in the few mild cases I have been called upon to treat lately in Paris, I have found five-grain doses of phenacetin every four hours answer capitally, the pain ceasing and the temperature being lowered rapidly.

The Length of the Urethra.

To judge by the varying figures given by different authorities, it would seem to be advisable to allow a large margin when asked at an examination to state the length of the male urethra. The *Union Méd. du Nord-Est* publishes a list of measurements gathered from the writings of twenty-one different anatomists, from which it appears that while Richet gives the length as 15 centimetres, Heister allows more than its double—viz, 33·5. Sappey states that the length varies not only in different individuals, but also with age. Richet denies this latter assertion. A definite understanding on this moot point is urgently required, seeing the popularity of Guyon's instillation method of treatment for gleet.

Yet another New Medical Society in Paris.

In last week's correspondence it was announced that an association of foreign doctors practising in Paris had been recently founded, and reference was made to the two-year-old Continental Anglo-American Medical Society. It is felt by English practitioners residing in this city that both the above bodies are open to the same reproach in being somewhat too heterogeneous in the matter of membership, and it is thought that some effort should be made to bring more closely together those British practitioners residing in France who, in addition to being subjects of Her Majesty, are possessed of British diplomas. It is accordingly in contemplation to create an association whose business it shall be to give such information to the public through its published official list as to enable them to distinguish between the real and the pseudo-English physicians, as also to promote good-fellowship between men hailing from the London, Edinburgh, Dublin, and provincial schools of medicine in the old country. I heartily wish the new society the success it deserves.

Breton Ignorance.

M. Renan's compatriots enjoy, rightly or wrongly, the reputation of being rather behindhand in civilisation. A local doctor has just addressed a report to the Préfet of Morbihan, from which it would appear that these primitive people have not been altogether maligned, at least in so far as ignorance of the laws of health are concerned. In 1884 typhoid fever made its appearance in the commune of Langoëlan, whose inhabitants, distributed over numerous hamlets, number 1350. Twenty-three hamlets and the market town have been visited by the scourge, some of them several times in succession since the first outbreak, and typhoid fever has evidently taken up permanent quarters in the unlucky commune. Add to this that the mortality is enormous (at Kervoten seven cases with four deaths, and at Cosquer eight with five deaths), and it will be conceded that the state of affairs is serious. The reason is not far to seek; I give it in Dr. Langlais' own words: "Les déjections sont répandues à la porte, sur le fumier de la cour; au milieu de cette cour est creusé le puits, véritable drain qui pompe tous les liquides et tous les germes. Chaque malade est un objet de curiosité qu'il faut visiter, à qu'il faut serrer la main, qu'on doit embrasser, et l'on boit au même verre que lui." What a happy hunting ground for the lively typhoid bacillus, and what scope for the sanitary reformer!

Paris, Jan. 20th.

BERLIN.

(FROM OUR OWN CORRESPONDENT.)

Influenza.

ACCORDING to official statistics, only 25 persons died in Berlin of influenza between 1878 and 1889. Of these years 1887 had the highest influenza mortality—namely, 7. The number of deaths in 1889 was 54, in 1890 90, and in 1891, before Dec. 12th, 286. Those are all the cases in which influenza was expressly given as the cause of death in the death certificates. In 1890 only June and November had no deaths from influenza; in 1891 only July and September. There were 5 deaths from this cause in the second week of last November, 36 in the next, 61 in the next, 88 in the next, and 80 in the next. The Berlin horses are said to be suffering pretty severely from influenza. Kitasato, who works under Pfeiffer in the scientific department of Koch's institute, has succeeded in cultivating Pfeiffer's influenza bacillus in pure cultures to the tenth generation. In several uncertain cases the diagnosis of influenza has been confirmed by the finding of Pfeiffer's bacillus in the blood.

An Explanation of the Effect of Quinine.

An explanation of the therapeutic effect of quinine in malaria has at last been found. So long ago as 1867 Dr. Karl Binz, professor of pharmacology at Bonn, gave an explanation which was little noticed at the time, but has now been signally confirmed by the discovery of the germ of malaria. He showed that quinine hydrochlorate, with neutral or slightly basic reaction, is a strong poison for the protoplasms of decomposing plants, and greatly hinders many fermenting and putrescent processes. A. Laveran, the discoverer of the plasmodium malariæ, has demonstrated that this organism disappears from the blood of malaria patients after the administering of quinine, and that quinine, if permitted to act upon it directly, kills it.

The Berlin Medical Society.

At the general meeting of the Berlin Medical Society on the 12th inst. Professor Virchow was appointed President by an enormous majority. Of 137 votes, 135 were given for him, one for Professor von Bergmann, and one for Professor von Bardeleben.

New Books.

"Evolution" (a new view of Darwinism), by Wilhelm Russbüldt; "On the threatening Physical Degeneration of civilised Mankind and the Nationalisation of the Medical Profession," by Dr. Schallmayer; "The Tasks and Aims of Hygiene," by Dr. Krocker; "On the Sanitation of Heligoland in the years 1886–1889," by Dr. Lindemann; "On the recently proposed Measures of Sanitary Police for

preventing the Spread of Tuberculosis," by Dr. Behrens; "The Prevention of Mortality in Childbed and of Several Diseases of Women," by Dr. Eberhart (second edition); "How can we Preserve Ourselves and our Children from Nervous Diseases?" by Professor Seeligmüller (second edition); "Take Care of the Health of School Children" (Berlin: Wilhelm Issleil); "Protection against Diphtheria," by Dr. Panse; "The Diseases of the Hair," by Dr. Pohl-Pincus (fourth edition); "Ex Malis Minima": reflections on prostitution, by a University Teacher; "The Riddle of Hypnotism and its Solution," by Dr. Jordan; and "The Fundamental Features of Natural Medicine," by Dr. Sturm (second edition).

Notes on Appointments, &c.

One of Professor von Bardeleben's Christmas presents which came from the Berlin Medical Society was an artistically adorned address of congratulation on the recent attainment of the fiftieth anniversary of his graduation as doctor of medicine.—Professor Klebs of Zurich has resigned his professorship in order to devote himself to private study. His successor is Professor Ribbert of Bonn.—Professor Biermer of Breslau, one of the most eminent clinical teachers in Germany, has resigned his professorship, and will be succeeded by Professor Kast, head physician of the large new hospital in Hamburg, to whom, along with the chemist Baumann, we owe sulphonal.—Dr. Ferdinand Hueppe of Prague, one of the oldest and most eminent of Robert Koch's pupils, has been appointed Ordinary Professor.—Dr. Hermann Reinhard, Privy Medical Counsellor and President of the Medical Board of Saxony, died on the 10th inst. at Dresden. — Professor Knauff of Heidelberg has been appointed Ordinary Professor of Hygiene and Forensic Medicine there.—Dr. Rossgarten, Private Lecturer on Otiatrics in the University of Kiel, has been appointed Extraordinary Professor there.—Dr. von Starck, Assistant in the Medical Policlinic in Kiel, has been appointed Prof. Elessen's successor in that institution, and Extraordinary Professor.—Dr. Erich Peiper, private lecturer in the University of Greifswald, has been appointed Extraordinary Professor in the Medical Faculty there.—Dr. Reinhold Schmaltz, lecturer on histology and embryology in the Veterinary Academy here, has been appointed Professor.

Berlin, Jan. 18th.

EGYPT.

(FROM OUR OWN CORRESPONDENT.)

Death of his Highness the Khedive.

So many stories have been circulated about the illness of the Khedive, which ended so suddenly and so disastrously, that it may be well to give the true account as gleaned from eye witnesses. It appears that the Khedive gave a dinner on Dec. 29th to Prince Damrong of Siam, who was then here, and that this was followed by a visit to the opera, after which his Highness, contrary to his usual custom, returned to Helouan, a desert suburb some three-quarters of an hour by train from Cairo. On Dec. 30th he was tired, but came to his Cairo palace as usual. On Dec. 31st he evidently had influenza, but nothing was known of this until a few days later, when a bulletin was published to the effect that his Highness was confined to his room with a severe cold, and that his temperature was 98°. His illness was considered by everyone to be very trifling until the night of Jan. 6th, when the patient complained of severe pain, for which one of his two Egyptian medical attendants injected morphia. As there was no relief he twice repeated the injection, giving four-fifths of a grain within about twenty minutes. The doctor then went to bed himself, but was roused later by the servants, who were frightened at the Khedive's state. This doctor then told the Vice-Reine there ought to be a consultation that night, but his colleague tried to oppose this, and said he took all the responsibility of the illness upon himself. The Vice-Reine, however, sent a special train to Cairo to summon Dr. Hess (Swiss) and Dr. Comanos (Greek), a translation of whose report is subjoined below. When they reached the Royal patient they found him almost dying, with two servants rubbing his legs and a native doctor rubbing his back. They at once ordered brandy or champagne, but none could be found in the palace. They seem to have been somewhat misled by their native colleagues, who stated that they had examined the urine and found it free from albumen, the real truth being (it is said) that there was already suppression of urine, and no analysis of it had been made. The two European doctors would seem to have hardly appreciated the gravity of the situation, for they returned to Cairo for some hours and paid a second visit about noon. They were then compelled to eject ether and caffeine, the drugs being obtained from a good German chemist in Helouan. I may here say that no one seems to have had any confidence during the illness in two Egyptian dispensers who were attached to the palace. The European doctors determined to obtain a specimen of urine by catheter, and sent a special messenger to Cairo for an instrument. One of them, however, in the meantime discovered some catheters at the house of a European colleague resident at Helouan, who refused to lend them, but was quite willing to bring them to the bedside of the dying Khedive. The urine when drawn off was examined by the German chemist, who found some blood from the catheterisation, and about one-twelfth albumen. The specific gravity of the urine was not taken, and there was no microscopical examination. All this time the two native doctors continued to affirm that the patient was better, and could hardly be made to believe the existence of albumen. Telegrams to Cairo continued to ignore the dangerous state of the patient, and nearly everyone was thereby deceived. When his Highness was moribund Drs. Wildt, (German), Ambrosa (Italian), and Binet (Swiss) arrived from Cairo, but could of course do nothing. Death took place at 7.15 P.M. on Jan. 7th, and the death certificate was worded, "Uræmia and pneumonia consequent on influenza." Needless to say the native doctors completely lost their heads before the fatal result, and one of them disappeared entirely for a few days. There was no necropsy, but an examining commission is now being held, consisting of five—Drs. Rogers (English), Ibrahim Pacha and Duruy Bey (Egyptians), Wildt (German), and Binet (Swiss). This may possibly satisfy the international proclivities of certain people in Cairo, but can be of no other use. It is unnecessary here to give the names of the two native doctors. They are two of the five Egyptian doctors who have been raised to the rank of pacha, and, besides having held such appointments as Chief of the Sanitary Department and Director of the Medical School, it should be stated that they owe all their advancement to the family of the poor Khedive whose life they did so little to save. There is now no means of knowing whether the albuminuria was a recent result of influenza or the evidence of chronic but undiscovered kidney disease. All accounts from the palace show the most culpable negligence and ignorance on the part of the native medical attendants. The following is the report of Drs. Hess and Comanos, addressed to the President of the Council of Ministers:—"At your Excellency's request to state our opinion on the illness and death of his Highness the Khedive, we have the honour to submit. On Thursday, Jan. 4th, at 4 A.M., we were called by special train to Helouan to consult about his Highness. We arrived there at 5.30, and were received by the private doctor of his Highness, who in a few words stated that his Highness had been ill for a week with influenza, with no abnormal symptom until the preceding evening, when the fever had increased. His Highness could not sleep, and there was dyspnœa, together with a pain in the left side. That an injection of morphia had been given to assuage the pain. After this statement we entered the sick room, and were disconcerted to see his Highness in a very alarming state. His general state was much altered, his complexion pale, and his appearance haggard. He was held up, half-sitting, in bed by two servants, and he had evident dyspnœa. He was not completely conscious of what was going on around him, and complained specially of not being able to see the light. We found a temperature of 104°, and a pulse too fast, very weak, and easily compressible. On examining the body we found a considerable broncho-pneumonia on the left side and general bronchial catarrh of the right lung. This condition of lungs, although serious, did not, however, account for the cerebral symptoms which were present, and therefore we directed our attention to other organs, and specially to the state of the kidneys. We thereupon asked for information from the doctors in charge about the urine, but we were told that there was nothing wrong. The examination being then

over, we prescribed a very rigorous treatment appropriate to our diagnosis, and we left for Cairo to warn important people about the serious state of his Highness. We returned to Helouan at 1 P M., and were much distressed to find that his Highness's state was decidedly worse, and that not only the chest symptoms were aggravated, but also the cerebral symptoms had reached a hopeless pitch. This last phase showed us clearly the existence of uræmia, and we insisted on seeing the urine, when we were told that his Highness had not urinated since the preceding evening. Then we passed a catheter, and obtained a certain quantity of dark-brown urine which by chemical analysis contained much albumen. We were then quite certain of the nature of the illness, that his Highness, as a sequence of influenza, had been attacked by infectious pneumonia complicated by nephritis of the same kind, and that, in his then state, all hope had disappeared. This did not prevent us from applying the most useful and most rigorous means that science could place at our disposal, but alas! without the least success. And we had the profound regret," &c.

Cairo, Jan. 12th.

AUSTRALIA.

(FROM OUR OWN CORRESPONDENT.)

The Influenza Epidemic.

THE influenza epidemic, which reached these shores early in the year and lighted up afresh towards midwinter, has now almost died out. This year the sickness has been more protean in its aspect, more widely spread, and more fatal in its course than the epidemic of last year. The principal manifestation has been pulmonary, and this has also been of the most fatal form. There has been a large number of deaths among the aged, the weak-lunged, and the alcoholics; but in proportion to the numbers attacked the death-rate has not been high Statistics to elucidate this latter point are very difficult to arrange, and are most probably very unreliable, for during the course of the epidemic every ache and pain and slight depression has been diagnosed as influenza.

The Medical Profession and the Political Situation.

The defeat of Sir Henry Parkes and the advent of a Protection Ministry to office in New South Wales is of more than passing interest to the medical profession. Heavy duties have been imposed on drugs, spirituous compounds and medicaments, surgical instruments and dressings. These duties will have the effect of raising the price of medicine very considerably; but I doubt if there are many, even amongst the most ardent of the Government supporters, who will pay their doctors a larger fee. But the duties will also have a beneficial effect in keeping out of the country the very inferior class of goods with which it has recently been flooded. The Ministry, however, have given the profession a *quid* for this increased taxation. They have introduced as a Government measure, and passed through the Legislative Council, a Bill which provides that everyone practising medicine must plainly state in his advertisement or on his doorplate his qualifications for so practising. This is a very small advance towards the regulation of the practice of physic, but it is a step in the right direction. Another good action on the part of the Government was to begin the completion of the Sydney Hospital. There is, perhaps, not a greater monument of political ineptness in all Australia than the Sydney Hospital. Half a score of years ago a new hospital was projected, specifications prepared, the work sanctioned, the money voted, and the contract signed. The old building was pulled down and a temporary structure erected, and the work of the new hospital progressed. Then it was found that the money voted would scarcely pay for the foundations, and that, instead of £60,000 or £70,000, it would require nearly £250,000 to carry out the plans. Accordingly the work was stopped, and the unfinished building has since been an eyesore to the citizens of Sydney. The temporary buildings have not provided the accommodation required, and overcrowding has occurred to such an extent that the chief of the Sydney Fire Brigade made a report on the matter, in which he stated that in the event of a fire breaking out there would be 200 lives lost. Recently a commission was appointed to consider the matter, but the late Government made no move. The medical superintendent, Dr. Hull, has, however, kept pegging away, and made the public acquainted with the dangerous position of the patients, and as a consequence the hospital will shortly be recommenced. Meantime the patients have been reduced in number as much as possible, and have been located in the old nursing quarters, while the nurses have been housed some distance off. Dr. Hull is to be congratulated on the success of his persevering efforts.

Obituary.

BRIGADE SURG. F. R. WILSON, M.B.DUB., L.R.C.S.I.

WE regret to have to record the death of Dr. F. R. Wilson, Brigade Surgeon, 42nd District. Dr. Wilson was educated at Trinity College, Dublin, where he took his M.B. degree in 1857. He entered the army, after acting as travelling physician to the late Lord Bangor, and served in the 20th Regiment for a long term of years. During the Ashantee war Dr. Wilson had charge of the base hospital at Conderis, and for his services in that war was specially thanked by the Director-General and twice publicly thanked by the military authorities. Dr. Wilson served twice in India, and eventually was in 1881 appointed Brigade Surgeon to the 42nd Regimental District at Perth. There he served until he was seized with influenza and pneumonia, from which he died after a brief illness on Jan. 10th. He was much beloved by his brother officers as well as by the men attached to the depôt, and his presence will be much missed by the medical men of the district.

W. WAYLAND KERSHAW, M.D. ST. AND, F.R.C.S. ENG.

A VERY beautiful character suddenly passed away at Surbiton on the 15th inst. The hand of death has recently pressed heavily everywhere, and to the great sorrow of very many friends and patients it has fallen on one of the most honourable and devoted servants of the medical profession. For forty years Dr. Kershaw had practised in Kingston-on-Thames, Surbiton, and the neighbourhood, and with that uprightness of character and professional skill which secured for him a reputation second to none in the county, and, what is perhaps even more, he was esteemed and loved by everyone who had the privilege of his acquaintance, from the highest to the lowest.

Medical News.

EXAMINING BOARD IN ENGLAND BY THE ROYAL COLLEGES OF PHYSICIANS AND SURGEONS.—The following gentlemen passed the Second Examination of the Board in the subjects indicated at a meeting of the Examiners on the 13th inst.:—

Anatomy and Physiology.—Charles H. Dunstan, George S. J. Boyd, and Leonard L. Burton, students of London Hospital; James J. Coleman and Herbert E. Cock, of Guy's Hospital; Arthur Stanley and Joseph Ashton, of St. Mary's Hospital; Graham S. Pownall, of St. Bartholomew's Hospital; David H. Fraser, of St. Thomas's Hospital; and John C. Clemesha and Robert A. Bowie, of McGill University, Montreal.

Anatomy only.—Nugent B. Baker, of St. Bartholomew's Hospital; Alfred Carruthers and Walter J. O. Ray, of St. Thomas's Hospital; Percy James Curtis, of Guy's Hospital; Alfred K. M. Curtis and Roderick Sim, of Middlesex Hospital; Arthur A. Lewin, of McGill University, Montreal; and Arthur R. S. Freeland, of London Hospital.

Physiology only.—William G. Noble, of London Hospital; Bernard P. O'Neill, of Guy's Hospital; Frederick A. W. Quay, of Trinity College, Toronto; and Henry C. Clark, of Middlesex Hospital.

Passed on the 14th inst.:—

Anatomy and Physiology.—Walter H. Bracewell, of Melbourne University; Richard Lawson, of St. Thomas's Hospital; Ernest F. G. Tucker, John D. Galloway, and Henry W. Grattan, of London Hospital; Edward W. de Kretser, of Ceylon Medical College; Robert C. Griffith, of Toronto University; Leonard W. Oliver, of St. Mary's Hospital.

Anatomy only.—Wm. C. F. Hayward and Frederick A. L. Hammond, of Charing-cross Hospital; Walter Mawer, Herbert W. Carson, and

Mark Taylor, of St. Bartholomew's Hospital; Charles H. Wilmer, of St. Bartholomew's Hospital and Mr. Cooke's School of Anatomy and Physiology; Debonnaire F. Maunsell, of St. Thomas's Hospital; Francis E. Bromley, W. V. P. Teague, and Sidney H. L. Archer, of London Hospital; Frank Romer, of St. George's Hospital and Mr. Cooke's School of Anatomy and Physiology; Gerald S. S. Marshall, of Middlesex Hospital; Edward G. Frederick, of King's College; and William H. Chute, of Westminster Hospital.

Physiology only.—Percy L. Moore, of Cambridge University; George M. Bennett, Leonard A. Williams, and Edward D. J. O'Malley, of Middlesex Hospital; Archibald W. Lamb and James E. Jones, of St. Bartholomew's Hospital; Richard Slocock, Vyner Graham, Arthur D. Cowburn, and Savignac B. Stedman, of St. Thomas's Hospital; Joseph A. W. Pereira, of Bombay and Charing-cross Hospital; Walter L. Roberts and John N. Hall, of St. Mary's Hospital; David Evans, of University College; John Heard, of Westminster Hospital; Lewin Bensted and Frank H. L. Cloud, of Guy's Hospital.

In Anatomy and Physiology 106 candidates presented themselves for examination, of whom 32 were referred in both subjects for three months and 4 for six months; 12 were referred in Anatomy only, and 19 in Physiology only. In Anatomy only there were 27 candidates, of whom 5 were referred for three months; 37 candidates presented themselves in Physiology only, 12 of whom were referred for three months.

UNIVERSITY OF CAMBRIDGE.—At a congregation held on the 15th inst. the following degrees were conferred:—

Bachelors of Medicine and Bachelors of Surgery.—William Henry Fisher, Gonville and Caius; George Pinder, Queen's; and Robert Redman Law, Christ's.

THE HOSPITAL SUNDAY FUND has received an anonymous donation of £500.

HOSPITALS FOR INFECTIOUS DISEASES.—At a recent meeting of the Stratford-on-Avon rural sanitary authority a resolution was carried to provide two or three cottage hospitals in the district for the isolation of patients suffering from infectious disease, instead of having a central sanatorium in the town. A committee was appointed to make the necessary arrangements.—At a meeting of the Mexborough Local Board a letter was read from the agent of Mr. Montagu, of Ingmanthorpe Hall, in which that gentleman consented to give an acre of land suitable for the erection thereon of a hospital for infectious disease.—The Thornhill District Committee of the Dumfries County Council have recommended the erection of two hospitals for infectious diseases—one near Sanquhar, the other at the lower end of the district.—The new hospital for infectious diseases, erected by the Brentford Local Board from designs of Mr. J. H. Strachan, was opened at Ealing on the 14th inst.

MANCHESTER MEDICAL SOCIETY.—The following gentlemen have been elected office-bearers for 1892:—President: Alfred William Stocks. Vice-presidents: Henry Ashby, M.D., Frederick William Jordan, John Dixon Mann, M.D., and Charles Jeremiah Renshaw, M.D. Treasurer: Charles Edward Glascott, M.D. Elected Members of Committee: George Bowman, M.D., Judson Sykes Bury, M.D., Colin George Campbell, William Coates, Alexander Carson Clarke, M.D., Richard Crean, M.D., Archibald Donald, M.D., Abraham Matthewson Edge, M.D., Siegmund Moritz, M.D., William Japp Sinclair, M.D., Frederick A. Southam, M.B., and Graham Steell, M.D. Secretary: Thomas Carleton Railton, M.D. The above form the committee. Library Committee: Henry Ambrose Grundy Brooke, M.B., Abraham Matthewson Edge, M.D., Leopold Larmuth, M.B., Siegmund Moritz, M.D., and Richard Thomas Williamson, M.D. Auditors: Charles Edwin Smith and John Prince Stallard, M.B.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.—The following members were elected as officers and councillors for the year 1892:—President: J. Howard Mummery. Vice-Presidents: Messrs. David Hepburn, T. H. G. Harding, R. H. Woodhouse, J. H. Redman (Brighton), R. T. Stack (Dublin), and F. H. Balkwill (Plymouth). Treasurer: Mr. Thomas Arnold Rogers. Librarian: Mr. Ashley Gibbings. Curator: Mr. Storer Bennett. Editor of Transactions: Mr. Walter Coffin. Honorary Secretaries: Messrs. John Ackery (Council), W. A. Maggs (Society), and F. Henri Weiss (for foreign correspondence). Councillors: Messrs. W. Hern, F. Newland Pedley, C. J. Boyd Wallis, F. J. Bennett, Cornelius Robbins, E. G. Betts, Morton Smale, B. J. Bonnell, E. Lloyd Williams, W. B. Bacon (Tunbridge Wells), H. B. Mason (Exeter), Mordaunt A. de C. B. Stevens (Nice), T. S. Carter (Leeds), W. S. Woodburn (Glasgow), W. H. Williamson (Aberdeen), H. C. Quinby (Liverpool), D. W. Amoore (St. Leonards), and Wilson Hogue (Bournemouth).

EPSOM COLLEGE.—W. L. Lawrence has passed into Sandhurst direct from this school in the recent examination into the Line; and F. G. Davey, who left in July, into the Cavalry, both members of our "Army Class."

COTTAGE HOSPITAL, HERNE BAY.—The opening ceremony of this hospital took place on the 1st inst. The hospital is a commodious building in New-street, known as Vine Cottage. To complete the accommodation provided additional furniture and bedding are required.

NEW INFIRMARY, TOXTETH PARK, LIVERPOOL.—The Toxteth Guardians last week accepted a tender for the erection of the proposed new infirmary on land adjoining the Southdown-road Workhouse. It will accommodate 380 beds in the hospital proper, or 420 including reception and vagrant wards. The outlay is estimated at £34,909.

LIVERPOOL MEDICAL INSTITUTION.—At the annual meeting held on the 14th inst. the following list of officers, council, and microscopical committee was adopted:—President: T. R. Glynn, M.D. Vice-Presidents: J. N. Cregeen, L.R.C.P., F. W. Lowndes, M.R.C.S., E. W. Hope, M.D., and J. Hellett Smith, L.R.C.P. Hon. Treasurer: J. W. Warburton, M.D. Hon. General Secretary: W. Mactie Campbell, M.D. Hon. Secretary of ordinary meetings: G. Gibson Hamilton, F.R.C.S.E. Hon. Librarian: Peter Davidson, M.B. Council: T. Bushby, L.R.C.P., Richard Caton, M.D., J. R. Logan, M.B., Frank T. Paul, F.R.C.S., G. G. S. Taylor, M.D., Glynn Whittle, M.D., W. Mitchell Banks, F.R.C.S., A. Barron, M.B., C. H. Shears, M.R.C.S., Henry Wilson, M.D., A. C. Harris, M.B., and N. E. Roberts, M.B. Microscopical Committee: J. H. Abram, M.D., A. Barron, M.B., T. B. Grimsdale, M.B., G. G. Hamilton, F.R.C.S., F. C. Larkin, F.R.C.S., J. R. Logan, M.B., F. T. Paul, F.R.C.S., J. Wiglesworth, M.D., R. W. Murray, F.R.C.S., and W. Thel. Thomas, F.R.C.S.

METROPOLITAN ASYLUMS BOARD.

Return of Patients remaining in the several Fever Hospitals of the Board at Midnight on January 19th, 1892.

Hospital.	Beds occupied.						Total accommodation.
	Scarlet fever.	Diphtheria.	Typhus fever.	Enteric fever.	Other diseases.	Total.	
Eastern Hospital	209	54	..	45	3	311	442
North-Western Hospital	247	37	..	15	..	299	411
Western ,,	102	21	..	15	2	140	224
South-Western ,,	195	46	..	24	2	267	350
South-Eastern ,,	203	16	4	67	5	295	424
Northern ,,	397	26	..	17	...	440	480
Totals	1353	200	4	183	12	1752	2331

SMALL-POX.—*Atlas* hospital ship, 5.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.*

BLYTHE, J. C., L.R.C.P., L.R.C.S. Edin., has been appointed Medical Officer for the Hindon Sanitary District of the Tisbury Union.

BUXTON, DUDLEY W., M.D., M.R.C.P., has been appointed Anæsthetist to the National Hospital (Albany Memorial), Queen-square, Bloomsbury, vice Dr. J. F Silk, resigned.

COLLINS, E. TREACHER, F.R.C.S. Eng., has been appointed Ophthalmic Surgeon to the Belgrave Hospital for Children.

FRASER, H., M.A., M.B., C.M. Aberd., has been appointed House Surgeon to the Edinburgh Royal Maternity and Simpson Memorial Hospital.

GRACE, H., L.R.C.P. Lond., M.R.C.S., has been reappointed Medical Officer to the Kingswood Local Board.

GRATTE, C. BROOKE, M.R.C.S., L.R.C.P. Lond., has been appointed Honorary Surgeon to the Newport and County Infirmary.

HARPER, H. C., M.R.C.S., L.R.C.P. Lond., has been appointed Medical Officer of Health for the Rural Sanitary District of the Stow Union.

HART, D. B., M.D. Edin., F.R.C.P., has been appointed Physician to the Edinburgh Royal Maternity and Simpson Memorial Hospital.

LEITCH, W. J., L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed Medical Officer for the Omagh No. 2 Dispensary District, vice M'Master, resigned.

LEVICK, G. D. B., M.R.C.S., L.R.C.P., L.S.A. Lond., has been appointed Obstetric House Physician to the Middlesex Hospital.

LEWIS, J. N., M.R.C.S., L.R.C.P. Lond., has been appointed Honorary Surgeon to the Newport and County Infirmary.

MCLAY, R., M.B., C.M. Glasg., has been appointed Visiting Surgeon to the Dumbartonshire Combination Fever Hospital.

MERRYWEATHER, S. H., L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed Medical Officer for the Skelton Sanitary District of the Guisborough Union.

NICHOLSON, H. O., M.B., C.M. Aberd., has been appointed House Physician and Surgeon to the Aberdeen Hospital for Sick Children.

PERNET, GEO., M.R.C.S., L.R.C.P. Lond., has been appointed Assistant to Out-patients', Surgeon and Physician, University College Hospital. (The announcement of this appointment, last week, was not quite accurate).

RUNCIMAN, N. H., L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed Medical Officer of the Cork Dispensary, vice Harvey.

TURNER, E. O., M.B. Lond., L.R.C.P., M.R.C.S., has been appointed Medical Officer of Health for the Rural Sanitary District of the Aberystwith Union.

WAGSTAFF, FRANK R., M.R.C.S., L.R.C.P. Lond., has been appointed Surgical Registrar to the Children's Hospital, Great Ormond-street.

YARROW, G. E., M.D. Heidelb., L.R.C.P. Lond., M.R.C.S., has been reappointed Medical Officer of Health for the parish of St. Luke.

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement.

BOROUGH LUNATIC ASYLUM, Portsmouth.—Clinical Assistant for six months. Board, rooms, lodging, washing, and attendance provided.

BRISTOL GENERAL HOSPITAL.—Surgeon Dentist.

CHILDREN'S HOSPITAL, Birmingham.—Assistant Resident Medical Officer. Salary £40 per annum, with board, washing, and attendance in the Institution.

COUNTY BOROUGH OF BRADFORD FEVER HOSPITAL.—Resident Medical Superintendent of the Fever Hospital. Salary £200 per annum, with board and residence. (Apply to the Town Clerk, Town Clerk's Office, Bradford.)

EAST LONDON HOSPITAL FOR CHILDREN, Shadwell, E.—Resident Medical Officer for two years. Salary £80 per annum, with board lodging, and washing.

EAST LONDON HOSPITAL FOR CHILDREN, Shadwell, E.—House Surgeon. Board and lodging provided.

EAST LONDON HOSPITAL FOR CHILDREN, Shadwell, E. — House Physician. Board and lodging provided.

GENERAL HOSPITAL, Birmingham.—Assistant Surgeon for three years. Honorarium £100 per annum.

GENERAL HOSPITAL, Birmingham.—Three Assistant House Surgeons for six months each. Residence, board, and washing provided.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton.—Resident House Physicians.

KENT COUNTY LUNATIC ASYLUM, Chartham, near Canterbury.—Medical Superintendent. Salary £600 per annum, with unfurnished house, gas, washing for himself and family, and produce of garden.

LIVERPOOL DISPENSARIES.—Head Surgeon. Salary £200 per annum, with apartments, board, and attendance. (Apply to the Secretary, Leith Offices, 34, Moorfields, Liverpool.)

LONDON FEVER HOSPITAL, Liverpool-road, Islington, N.—Physician.

LONDON FEVER HOSPITAL, Liverpool-road, Islington, N.—Assistant Physician.

NEWTON ABBOT UNION.—Medical Officers and Public Vaccinators for the Chudleigh (No. 7) District of the Union and for the Ashburton (No. 1) District of the Union respectively. (Apply to the Clerk, Union Offices, Newton Abbot.)

PETERBOROUGH INFIRMARY AND DISPENSARY.—Assistant Surgeon.

QUEEN CHARLOTTE'S LYING-IN HOSPITAL, Marylebone, N.W.—Resident Medical Officer. Salary £60 per annum, with board and residence in the hospital.

RADCLIFFE INFIRMARY, Oxford.—House Surgeon. Salary £80, with board, lodging, and washing. Tenable for two years.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—Two Examiners.

ROYAL SOUTH LONDON DISPENSARY.—Surgeon-in-Ordinary. Honorarium £20 per annum. (Apply to Resident Officer, St. George's Cross, S.E.)

ROYAL PORTSMOUTH, PORTSEA, AND GOSPORT HOSPITAL.—Assistant House Surgeon for six months. Board, residence, and washing, and an honorarium of 15 guineas at expiration of term of office.

ST. LUKE'S HOSPITAL.—Resident Clinical Assistant for six months. Board and residence provided.

THE COPPICE, Nottingham.—Assistant Medical Officer. Salary £120 per annum, with furnished apartments, board, washing, and attendance

Births, Marriages, and Deaths.

BIRTHS.

MAPLESON.—On Jan. 7th, at Nottingham-terrace, York-gate, N.W., the wife of Horsley Mapleson, M.R.C.S., of a daughter.

ROSS.—On Jan. 13th, at Jumper Green, Midlothian, the wife of R. Russell Ross, M.B., C.M. Edin., Rio Tinto, Spain, of a son.

THOMSON.—On Jan. 16th, at 14, Coates-crescent, Edinburgh, the wife of John Thomson, M.D., F.R.C.P.E., of a daughter.

WALKER.—On Jan. 15th, at Pine House, Hurworth-upon-Tees, near Darlington, the wife of Dr. C. E. Walker, of a son.

WOLFENDEN.—On Jan. 13th, at The Crofts, Pangbourne, Berks, the wife of R. Norris Wolfenden, M.D. Cantab., of a son.

MARRIAGES.

BRAINE—EVANS.—On Jan. 16th, at Christchurch, Waterloo, Charles Carter Braine, F.R.C.S., of Maddox-street, W., to Harriette, elder daughter of John Evans, Esq., of Riversdale, Liverpool.

COTTON—FRANCE.—On Jan. 14th, at St. Helens, by the Rev. R. J. Ward, assisted by the Rev. A. G. Bridge, John Cotton, M.R.C.S., L.R.C.P., L.S.A., eldest son of Mr. John Cotton, chemist, St. Helens, to Mary Mabel, only daughter of Mr. Francis France, Cowley Bank, St. Helens.

JOHNSTON—NESBETT.—On Jan. 19th, at St. James's Church, Shirley, Southampton, Dr. James Alfred Johnston, of Forest Lodge, Shirley, son of Dr. Johnston, Westport, to Emma Parsons, daughter of Major-General Nesbett, of Clarence Lodge, Shirley.

SEATON—MARSHALL.—On Jan. 19th, at St. Luke's Church, Chelsea, Edward C. Seaton, M.D., of The Limes, Clapham-common, S.W., Medical Officer of Health for the County of Surrey, and Lecturer on Public Health, St. Thomas's Hospital, to Ellen Jeannette, elder daughter of the late Prof. John Marshall, F.R.S. (President of the General Medical Council), and Mrs. Marshall, of Bellevue House' Cheyne-walk, Chelsea, S.W.

STANIFORTH—MAXWELL.—On Jan. 19th, at St. George's Church, Sheffield, by the Rev. R. C. Joynt, Vicar, John W. Staniforth, M.R.C.S., L.R.C.P. Lond., Hinderwell, R.S.O., Yorkshire, to Mary, eldest surviving daughter of the late T. D. Maxwell, D.L., R.I.C., Lisnaskea, Co. Fermanagh.

STREET—DAVIES.—On New Year's Day, at Malabar Hill Church, Bombay, by the Rev. Yorke Brown, Ashton Street, F.R.C.S. Eng., M.B. Cantab., Indian Medical Service, second son of Samuel Street, Esq., of Marple, Cheshire, formerly of Mirfield, Yorkshire, to Annette Clare, third daughter of the late Herbert Davies, M.D. Cantab., F.R.C.P., of 23, Finsbury-square, London.

DEATHS.

BEALE.—On Jan. 15th, at Weybridge, Frances, beloved wife of Lionel Smith Beale, of 61, Grosvenor-street, W., in her 65th year.

BRAMWELL.—On Jan. 18th, at 136, Duke-street, Southport, James Parker Bramwell, L.R.C.P. Edin., M.R.C.S. Eng., L.S.A., aged 43 years.

CHRISTIE.—On Jan. 15th, at Madeley-road, Ealing, Thomas Beath Christie, M.D., C.I.E., late Medical Superintendent of the Royal India Asylum, and the North Riding Asylum, York.

COOKE.—On Jan. 14th, at Upper Clapton, William Marten Cooke, M.D., once of Trinity-square, Tower, aged 79.

GAYE.—On Jan. 15th, William John Gaye, M.R.C.S., L.S.A., son of Charles Seaman Gaye, of Shefford, Bedfordshire, aged 82.

HARTLEY.—On Jan. 16th, at Perham-road, West Kensington, Dr. Edmund Hartley, formerly of Warwick-square, London, and Ivy Bridge, Devon, aged 75.

HASLER.—On Jan. 13th, at Eanam, Blackburn, Joseph Cocker Hasler, L.R.C.P., L.R.C.S. Edin., aged 29.

HILL.—On Jan. 15th, at Rose Hill, Oxford, Thomas Harvey Hill, M.R.C.S., L.S.A., formerly of Stanhope-terrace, Hyde-park, W., aged 80.

HOULDEN.—On Jan. 9th, at Crondall, Hants, Edward Robert Houlden, M.R.C.S., in his 84th year.

JACOB.—On Jan. 16th, at Argyle-road, Tottenham, Henry Long Jacob, M.R.C.S., in his 75th year.

KERSHAW.—On Jan. 15th, suddenly, at Surbiton, William Wayland Kershaw, M.D., in his 71st year.

MORRIESON.—On Jan. 11th, at Longwood, Hamilton-road, Ealing, James Stuart Morrieson, M.D., late Bengal Medical Establishment, aged 70.

NICKOLL.—On Oct. 13th, at his late residence, Auburn, Melbourne, Australia, John Sayer Nickoll, M.R.C.S., L.S.A., aged 38 years, dearly loved husband of Ida Nickoll, of influenza and pneumonia.

ROBINSON.—On Jan. 15th, at Ramsgate, Charles Robert Robinson, Surgeon-Major late 83rd Regt., youngest son of the late Stratford Robinson, of Jermyn-street, St. James's, in his 68th year.

STATHAM.—On Jan. 16th, at 50, Woburn-place, after a short illness, Hugh Worthington Statham, M.R.C.S., L.S.A., aged 83 years.

TATUM.—On Jan. 18th, in The Close, Salisbury, George Roberts Tatum, F.R.C.S., aged 84.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

Medical Diary for the ensuing Week.

Monday, January 25.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M., and on Tuesday, Wednesday, Friday, and Saturday at the same hour.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations daily at 10 A.M.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.

CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2.30.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and each day in the week at the same hour.

UNIVERSITY COLLEGE HOSPITAL.—Ear and Throat Department, 9 A.M.; Thursday, 9 A.M.

LONDON POST-GRADUATE COURSE.—Royal London Ophthalmic Hospital 1 P.M., Mr. Wm. Lang: Lachrymal Affections.—Great Northern Central Hospital: 8 P.M., Dr. Galloway: Lungs—Tubercular and other Lesions.

SOCIETY OF ARTS.—8 P.M. Professor George Forbes: Developments of Electrical Distribution. (Cantor Lecture.)

MEDICAL SOCIETY OF LONDON.—8.30 P.M. Clinical Evening. Mr. J. H. Morgan: Two cases of Compound Fracture of the Skull in Children treated by Trephining and Replacement of Bone.—Drs. W. Carr and Wallis Ord: Cases of Bronchiectasis in Children.—Mr. B. Pitts: Two cases of Plastic Operation for Contracture following Burn.—Dr. J. A. Ormerod: Spinal Disease, probably Syringomyelia.—Mr. Watson Cheyne: Fracture of Patella, illustrating the value of leaving off the splint early.—Mr. M. Sheild: Primary Chancre of the Cheek.

Tuesday, January 26.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.; Fridays and Saturdays at the same hour.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at same hour. Ophthalmic Operations on Monday at 1.30 and Thursday at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2 P.M.; Saturday, 2 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Consultations, Monday, 2.30 P.M. Skin Department, Monday and Thursday, 9.30 A.M. Throat Department, Tuesdays and Fridays, 1.30 P.M. Electro-therapeutics, same day, 2 P.M.

ROYAL INSTITUTION.—3 P.M. Professor V. Horsley: The Brain.

LONDON POST-GRADUATE COURSE.—Hospital for Skin Diseases, Blackfriars: 4 P.M., Mr. J. Hutchinson: Leprosy.—Bethlem Hospital: 2 P.M., Dr. Hyslop: Hysteria Mania.—Charing-cross Medical School: 8 P.M., Dr. Herman: The Symptoms, Diagnosis, and Treatment of Uterine Displacement.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—Mr. Henry J. Tylden: A Critique on Recent Researches in Diabetes Mellitus, with an Original Note on the Pathology of the Pancreas.—Mr. John Croft: Glandular Swelling in Neck; Conversion into a Pulsating Tumour-like Aneurysm; Ligature of Common and External Carotids, and of the Internal Jugular Vein.

SOCIETY OF ARTS.—8 P.M. Mr. William Morris: The Woodcuts of Gothic Books. (The paper will be illustrated by lantern slides.)

Wednesday, January 27.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1.30 P.M.; Saturdays, 2 P.M. Obstetrical Operations, Thursdays, 2 P.M.

CHARING-CROSS HOSTITAL.—Operations, 3 P.M., and on Thursday and Friday at the same hour.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.

LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.

ST. PETER'S HOSPITAL, COVENT-GARDEN.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 1.30 P.M.; Skin Department, 1.45 P.M; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.

CHILDREN'S HOSPITAL, GREAT ORMOND-STREET.—Operations, 9.30 A.M. Surgical Visits on Wednesday and Saturday at 9.15 A.M.

LONDON POST-GRADUATE COURSE.—Hospital for Consumption, Brompton: 4 P.M., Dr. H. Mackenzie: Functional Diseases of the Heart.—Royal London Ophthalmic Hospital: 8 P.M., Mr. J. B. Lawford: Syphilitic Choroiditis.—Parkes Museum: 1 P.M., Dr. Louis C. Parkes: Disposal of Refuse.

ROYAL METEOROLOGICAL SOCIETY.—7.15 P.M. Annual General Meeting. The President (Mr. Baldwin Latham): Evaporation and Condensation.

SOCIETY OF ARTS.—8 P.M. Mr. F. W. Edridge-Green: The Scientific Value of Lovibond's Tintometer.

HUNTERIAN SOCIETY.—8.30 P.M. Clinical Evening. Dr. F. J. Smith: Symmetrical Local Asphyxia.—Dr. Jas. Galloway: Peculiar Disturbances of Sensation.—Mr. C. J. Symonds: (1) Trigeminal Neuralgia; (2) Subclavian Bruit; (3) Papilloma of Larynx.—Mr. Openshaw: (1) Subdural Hæmorrhage, trephining, recovery; (2) Subdural Hæmorrhage simulating Hæmorrhage from Middle Meningeal Artery.

Thursday, January 28.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M. Surgical Consultations, Wednesday, 1.30 P.M. Ophthalmic Operations, Friday, 1.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Ear and Throat Department, 9 A.M.

ROYAL INSTITUTION.—3 P.M. Mr. A. S. Murray: Some Aspects of Greek Sculpture in Relief.

LONDON POST-GRADUATE COURSE.—Hospital for Sick Children, Great Ormond-st.: 4 P.M., Mr. R. M. Gunn: On the Examination and Treatment of Eye Diseases in Children.—National Hospital for the Paralysed and Epileptic: 2 P.M., Dr. C. E. Beevor: Anatomy and Physiology of the Brain with regard to Localisation.—London Throat Hospital, Great Portland-st.: 8 P.M., Dr. Ed. Law: Examination of Throat and Nose Cases.

BRITISH GYNÆCOLOGICAL SOCIETY.—8.30 P.M. Specimens by Dr. Bantock. Presidential Address by Professor A. R. Simpson.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.—8.30 P.M. Patients and Card Specimens at 8 P.M. Mr. Critchett: Case of Conical Cornea treated with the Galvano-cautery.—Mr. Gunn: Ophthalmoscopic Evidence of Arterial Change in Chronic Renal Disease.—Mr. Juler: Microscopical Demonstration of Hyloid Growth from the Lamina Vitrea.—Mr. Knaggs: Case of Tuberculosis of the Iris, Suspensory Ligament, and Retina.—Mr. Wray: Etiology, Prognosis, and Treatment of dotted Cataract

Friday, January 29.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

LONDON POST-GRADUATE COURSE.—Hospital for Consumption, Brompton: 4 P.M., Dr. H. Mackenzie: Graves's Disease.—Bacteriological Laboratory, King's College: 11 A.M. to 1 P.M., Professor Crookshank: Cultivation of Bacteria (Cultivations).—Charing-cross Medical School: 8 P.M., Dr. Herman: Painful Menstruation.

NEUROLOGICAL SOCIETY OF LONDON (Rooms of the Royal Medical and Chirurgical Society, Hanover square).—8.30 P.M. Annual General Meeting. Dr. Bastian (President-elect): The Neural Processes underlying Volition and Attention.

ROYAL INSTITUTION.—9 P.M. Sir George Douglas: Tales of the Scottish Peasantry.

Saturday, January 30.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; and Skin Department 9.15 A.M.

LONDON POST-GRADUATE COURSE.—Bethlem Hospital: 11 A.M., Dr. Hyslop: Delusional Insanity.

ROYAL INSTITUTION.—3 P.M. Professor J. A. Fleming: The Induction Coil and Alternate-Current Transformer.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, Jan 21st, 1892

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Maximum Temp. Shade.	Min. Temp	Rainfall.	Remarks at 8.30 A.M.
Jan. 15	29·51	N.W.	31	..	46	37	29	..	Overcast
,, 16	29·49	S.W.	34	32	55	38	30	..	Cloudy
,, 17	29·63	S.E.	35	33	48	40	32	..	Overcast
,, 18	29·74	S.E.	40	38	48	45	34	·03	Overcast
,, 19	29·85	S.E.	39	38	..	42	38	..	Overcast
,, 20	29·86	S.E.	38	36	48	40	35	..	Overcast
,, 21	29·96	S.E.	35	34	..	38	31	..	Foggy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editors."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor."

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

We cannot undertake to return MSS. not used.

THE INFLUENZA EPIDEMIC.

To the Editors of THE LANCET.

SIRS,—In as few words as possible allow me to state that in the later cases of influenza which have come under my care I have found the use of benzole surprisingly beneficial. It relieves the pain in back and head in a few hours, and reduces the fever permanently within twelve hours. *Ex. gr.*: Jan. 10th, 8 P.M. Young woman. Temperature 103°

eyes suffused; skin dry and burning; quick pulse; flushed face; pains all over body, &c. Prescribed as follows:—℞ Benzole pur., ℥ 80; spt. vini, ʒ ij.; spt. chlorof., ʒ iiss.; mucilag. trag., q.s.; aq. ad ʒ viij. M. ft. Bis horis ex aq. The first dose gave relief to pain &c. The second dose reduced the heat of the body &c. On Jan. 11th the temperature was subnormal both morning and evening. Patient free from pain; conjunctivæ normal. In fact, the patient was well but for a very slightly accelerated pulse. In view of the want of any known remedy of proved efficacy, benzole is certainly worthy of further trial. If we are to suppose that the influenza germ rests first on the pulmonary mucosa, then, so far as we know, benzole is perhaps the most suitable remedy. Within an hour of its administration the odour of the gas is pronounced in the breath.—I am, Sirs, yours faithfully,

Newcastle-on-Tyne, January, 1892. WM. ROBERTSON, M.D.

To the Editors of THE LANCET.

SIRS,—The recrudescence of the influenza epidemic again attracting our attention in the metropolis, where it is especially virulent in the presence of overcrowding, I should like to bring before the notice of the profession a simple but efficacious prophylactic—a remedy so simple and inexpensive as to be within the reach of every household and of every class of the community. During the two former outbreaks of the influenza epidemic in Westminster I have found it of such service, both in my own house and in my practice, that I now venture to advocate its general use.

I order an iron shovel to be heated in a fire, and have about half a teaspoonful of crude carbolic acid poured on the nearly red-hot shovel, and a dense vapour arises. If a house be thoroughly fumigated daily in this way, special attention being given to the sleeping apartments, I believe the infectious germs of the disease are destroyed, or counteracted, or eliminated. From practical experience I advocate the use of carbolic acid fumes as a preventive of influenza, and also as part of the remedial treatment. When, however, pulmonary complications arise, the fumes must be used with caution.

At this time, when Dr. Richard Pfeiffer has discovered the bacillus of influenza, I should like to hear what effects he finds carbolic acid has on it. I am, Sirs, yours faithfully,

Westminster, Jan. 9th, 1892. JAMES E. SINCLAIR.

Purchaser.—1. The question is one that had better be referred to a medical agent. 2. The reply to this question must depend upon the date when the purchase is fixed to take effect.

Inquirens.—We are not in a position to give a reply to the question.

AN AID TO DEFECATION.

To the Editors of THE LANCET.

SIRS,—An even greater "aid to defecation" than "pressure on the posterior half of the perineum," which Mr. Heath recommends, will be found in pressure with the finger upon the buttock just externally to the right lip of the anal orifice. Although the rectum in quite the last part of its course passes downwards in the middle line, yet the course of the gut has before that for long been from the left. The main impact of its protrusive force is therefore exercised, by means of the advancing fæcal mass, upon the right rectal wall near the anal orifice. Here therefore the opposing force should be brought to bear.

Experto crede. I am, Sirs, yours faithfully,

Tulse-hill, January, 1892. A. B. STEVENS, M.B. Oxon.

FUNERALS IN INCLEMENT WEATHER.

To the Editors of THE LANCET.

SIRS,—Kindly permit me to state that in a leaflet issued by the Council of the Funeral Reform Association, and approved by the archbishops and bishops, occurs the following pregnant sentence:—"Mourners are not expected to do anything, or leave anything undone, imperilling their own bodily welfare, or that of the community." The Association is of opinion that respect is best shown to the dead by due concern for the living.

I am, Sirs, yours obediently,

F. LAWRENCE,
Hon. Sec., Funeral Reform Association.

Westow, York, Jan. 18th, 1892.

Viator.—Several articles on the respective merits of different health resorts have appeared in THE LANCET, to which we must refer our correspondent.

Ubique has forgotten to enclose his card.

THERAPEUTIC VALUE OF TURPENTINE.

To the Editors of THE LANCET.

SIRS,—I can fully corroborate what Dr. Chapman says as to the therapeutical value of turpentine. During my period of service in the Royal Naval Hospital at Jamaica a large number of cases of typhoid fever came under my observation, the treatment I invariably adopted, in fact the only medicine I almost ever found it necessary to give, was turpentine in six-minim doses. Made into an emulsion with mucilage, the results were eminently satisfactory.

I am, Sirs, yours faithfully,

W. J. EAMES, M.R.C.P.I., &c.
Inspector General, Royal Navy.

Harlesden-road, N.W., Dec. 2nd, 1891.

NEWSPAPER ADVERTISEMENT OF MEDICAL SUCCESS.

A CORRESPONDENT in Liverpool sends us a paragraph from a newspaper referring to recent statements in THE LANCET as to the comparative non-success of means for disinfecting the typhoid poison or the diseased portion of the bowel and the greater success of a Liverpool practitioner described in our own columns. We may safely assume that the practitioner in question was no party to the publication of the paragraph in question. Clearly, newspapers are very wrong media for such paragraphs, which are likely to mislead the public.

Scrutator.—Our correspondent does not very clearly indicate which of two letters he refers to. But we cannot say that either strikes us as exceeding the bounds of what is permitted in a contest. Candidature has to be justified, and a candidate can scarcely do less than give the history of his professional career.

Mr. J. W. Greenwood.—Probably the gift could be obtained by application to Sir Henry Ponsonby.

Dr. Pisani.—We know of no such establishment.

"KISSING THE BOOK."

To the Editors of THE LANCET.

SIRS,—Permit me to point out that the very reasonable objection entertained by many to kissing the greasy cover of the Bible placed in their hands when the oath is administered in the usual form in the police courts and courts of justice is met and provided for by Clause 5 of the Oaths Act, 1888, Chapter 46, which runs as follows: "If any person to whom an oath is administered desires to swear with uplifted hand, in the form and manner in which an oath is usually administered in Scotland, he shall be permitted so to do, and the oath shall be administered to him in such form and manner without further question."

I am, Sirs, yours faithfully,

Jan. 19th, 1892. I.

Mr. Wm. Mackenzie.—It is perhaps needless to say that the quotation in the announcement is unwarranted.

Student should consult our Students' Number, wherein will be found all the information he desires.

Indomitable should consult a physician. We do not give advice.

ACUTE GOUT.

To the Editors of THE LANCET.

SIRS,—I beg to inform you that I have in three consecutive cases of acute gout found the blood to be swarming with a long encapsuled bacillus, side by side with which numerous crystals of biurate of soda are to be seen. I should be much obliged if you will kindly place this observation on record, to establish my claim to priority in the matter. I trust, however, to be able to give you some further description of this hitherto unrecorded bacillus in a future communication.

I am, Sirs, yours faithfully,

Putney, S.W., January, 1892. EDWD. GRÜN.

Lexington.—We have already expressed our opinion. (See THE LANCET of Jan 7th 1888, and May, 1889.

J. G. F.—We believe there is no warrant for the assumption, but the question has not been exhausted.

THE HODGSON FUND.

To the Editors of THE LANCET.

SIRS,—Allow me to acknowledge the following amounts for the widow and children of the late Dr. W. Bacon Hodgson:—Amount previously acknowledged, £62 12*s.*; British Medical Benevolent Fund, £18; Total, £80 12*s.* As this fund will now be closed, any further contributions will be gratefully received.

I am, Sirs, yours faithfully,

J. PHILLIP TOPPING.

271, Romford-road, Forest-gate, Jan. 18th, 1892.

A CORRECTION.

To the Editors of THE LANCET.

SIRS,—In the report of my second case at the Medical Society (THE LANCET, Jan. 16th, p. 141, line 4 in second paragraph of first column, or twentieth line from bottom of page) "right" should be *left*. The superficial gumma is, of course, on the same side as the paralysis. Readers will doubtless perceive that the error is clerical; but I should be obliged if this correction be inserted.

Believe me, Sirs, yours very truly,

Leeds, Jan. 18th, 1892. T. CHURTON.

THE BRITISH MEDICAL BENEVOLENT FUND.

To the Editors of THE LANCET.

SIRS,—At the annual meeting of subscribers yesterday a vote of thanks for the great assistance given by you to the fund by permitting the insertion of appeals &c. was passed, and I was requested to inform you of the fact. I am, Sirs, yours truly,

Jan. 15th, 1892. EDWARD EAST, Hon. Sec

COMMUNICATIONS not noticed in our present issue will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Althaus, London; Dr. Altham, Penrith; Mr. Aymard, Ipswich; Mr. J. W. Atkinson, London; Dr. Adam, West Malling; Mr. Alsop, Newton Abbot Union; Mr. T. B. Browne, London; Messrs. Burgoyne and Co., London; Dr. W. Brown, Stapleton; Mr. Briscoe; Messrs. Back and Co., London; Dr. L. Barlow, London; M. Berthier, Paris; Dr. J. Barr; Dr. Burghard, London; Dr. Blacker, London; Mr. Birchall, Liverpool; Dr. Beor, Brittany; Mr. L. Browne, London; Mrs. Bean, Heathfield; Mr. C. Boyd, London; Dr. Charteris, Glasgow; Dr. I. Clerk, Glasgow; Mr. Crerar, Maryport; Mr. R. Cail; Dr. Campbell, Liverpool; Messrs. Clark, Wolverhampton; Messrs. Carnrick and Co., London; Dr. Churton, Leeds; Mr. Cotterell, London; Mr. Clarke, London; Dr. Cooke, Sheffield; Dr. Campbell, London; Mr. A. Doran, London; Mr. W. W. Davies, Brighton; Mr. E. East, London; Mr. Fazakerley, Liverpool; Dr. Gowers, London; Messrs. Griffin and Co., London; Mr. Greenwood, Hanley; Mr. Goater, Nottingham; Dr. Galloway, London; Mr. C. Heath, London; Mr. F. G. Heath, London; Mrs. Hicks, London; Mr. Huntley, Hastings; Dr. Gordon Holmes, London; Mr. Huntley, Hastings; Mr. Hornibrook, London; Dr. Hebb, London; Mr. Hyde, Worthing; Dr. Jacobs, Brussels; Dr. Jones, London; Dr. Jacoby, New York; Messrs. Keene and Ashwell, London; Mr. J. Kershaw, St. Leonards; Mr. Kershaw, Manchester; Dr. J. Kerr, Bradford; Dr. Lewins, London; Dr. T. G. Lyon, London; Mr. Limont, Newcastle-on-Tyne; Messrs. Lloyd and Co., Leicesrer; Messrs. Livingstone, Edinburgh; Messrs. McFarlan and Co., London; Dr. Moorhead, Nottingham; Messrs. Maclehose and Sons, Glasgow; Mr. J. McDonald, London; Mr. Macpherson, Larbert; Mr. Maggs, London; Mr. Morris, London; Mrs. Macbride, London; Dr. Mackay, Huelva; Sir W. Moore; Mr. A. Maudsley; Mr. A. Nevins, Hanley; Dr. D. Newman, Glasgow; Messrs. Oliver and Boyd, Edinburgh; Mr. Preston, London; Mr. Pimm, Poultry; Mr. Parr, London; Dr. Pisani, Malta; Mr. G. C. Richardson, Harpurhey; Mr. J. M. Richards, London; Messrs. Reynolds and Branson, Leeds; Dr. Rentoul, Liverpool; Dr. Stevens, Springfield; Dr. F. J. Smith, London; Dr. A. Smart, Edinburgh; Messrs. W. H. Smith and Son, London; Mr. Stilliard, Birmingham; Messrs. S. Smith and Co., London; Mr. Silcock, London; Dr. Sisley, London; Mr. Squire, Whittingham; Mr. M. Scott, London; Dr. Swanson, Yorks; Mr. M. Sheild, London; Dr. Skrimshire, Holt; Sir H. Thompson, London; Professor Tait, Birmingham; Mr. Taylor, Redcar; Dr. W. W. H. Tate, London; Dr. Threadgale, Kilburn; Mr. Tredennick, Salop; Dr. Urquhart, Perth; Mr. Vickers, London; Dr. N. Walker, Edinburgh; Mr. Wand, Leicester; Dr. Walker, Southwell; Mr. Roger Williams, London; Mr. Wilson, Patricroft; Messrs. Wyleys and Co., Coventry; Mr. Wrixon, Ealing; Dr. Whitla, Belfast; Mr. Waters, London; Dr. H. Woods, London; Mrs. Yates, London; W. O. B., London; M. W., London; M.O.H., Staffs; Secretary, Peterborough Infirmary; Mu, Aldersgate-street; Surgery, Ramsgate; B., Colwyn Bay; S. G., London; A. M. A., Blisworth; Secretary, East London Hospital; E. M., London; Inquirens; Secretary, Wolverhampton Eye Infirmary; Secretary, Radcliffe Infirmary; Secretary, Borough Lunatic Asylum, Portsmouth; M.B., Leeds.

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NEWSPAPERS.—*Kentish Mercury, Law Journal, Dundee Advertiser, Clapham Observer, Brazilian Republic, Jarrow Express, South Wales Daily News, Brighouse and Rastrick Express, Jersey Times, Sanitary Record, Local Government Chronicle, Glasgow Herald, Metropolitan, Architect, Western Morning News, Newcastle Chronicle, Littlehampton News, Bradford Observer, City Press, Manchester Courier, Leamington Spa Courier, Le Temps (Paris), The Newspaper, Era, Halifax Free Press, South and North Lincolnshire Advertiser, Bradford Daily Telegraph, Le Rentier (Paris), Buckingham Express, Middlesex County Times, Halifax Courier, Insurance Record, Scotsman, Melbourne Age, Freeman's Journal, Bedfordshire Standard, Scottish Leader, Yorkshire Post, Reading Mercury, Surrey Advertiser, Builder, Liverpool Daily Post, Hertfordshire Mercury, Huddersfield Examiner, Hastings News, Montreal Herald, Worcester Echo, &c.*, have been received.

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